



User's Guide

Europe / Africa / Middle East only

Osprey 75/102/130



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WEEE regulations

Environmental information
Disposal of your old product



Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.

When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC

Please inform yourself about the local separate collection system for electrical and electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

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Important Notice

This product has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a commercial environment.

This product generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the this manual, may cause harmful interference to radio communications. Operation of this product in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at own expense.

1. Radio interference

This product generates weak radio signals and may interfere with television reception and utilities. If the product does interfere with radio or TV reception, try following:

- Change the direction of your radio and TV reception antenna or feeder.
- Change the direction of the product
- Move either the product or the receiving antenna so there is more distance between them.
- Be sure that the product and the receiving antenna are on separate power lines.

2. Trademarks mentioned in this manual.

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- **MUTOH EUROPE N.V. shall not be liable for any damages or troubles resulting from the use of this equipment or this manual.**

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Warranty Limitations

1. MUTOH EUROPE N.V. warrants part repair or replacement as a sole measure only if a failure is found in the system or in the materials and workmanship of the product the seller produced. However, if the cause of failure is uncertain, action is decided after due mutual consultation.

2. The warranty shall not apply to any direct or indirect loss, or compensation for the loss due to the product that has been subject to misuse, neglect, or improper alternation.

About This Manual

Section	Contents
1 Safety Instructions	Explains types of warnings, cautions and warnings labelled on the printer for both operators of the printer and maintenance personnel.
2 Product Overview	Explains the features, part names, and functions of the printer.
3 Basic Installation	Explains the procedures needed before using the printer.
4 Handling the printer	Explains how to handle the printer.
5 Maintenance	Explains daily maintenance of the printer.
6 Troubleshooting	Explains troubles that may occur when using the printer, and how to solve them.
7 Appendix	Explains the specifications, optional parts and supplies, installation procedures for optional parts, and user support for this printer.

⚠ Notes ⚠

- "Safety Instructions" through "Basic Installation" must be read before using the printer.
- Read "Handling the printer" through "Appendix" as necessary.

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1 SAFETY INSTRUCTIONS

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1.1 INTRODUCTION

This Item explains the meaning of safety terms for personnel operating this equipment, important safety instructions and the positioning of the warning labels.







Important

- **Be sure to follow all instructions and warnings in this manual when installing the equipment.**

1.2 WARNINGS, CAUTIONS AND NOTES

Safety terms in this manual and the contents of warning labels attached to the printer are categorized into three types depending on the degree of risk (or the scale of accident).

Read the following explanations carefully, and follow the instructions in this manual.

Safety terms	Details
 Important 	Must be followed carefully to avoid death or serious bodily injury.
 Caution 	Must be observed to avoid bodily injury (moderate or light) or damage to your equipment.
 Notes 	Contains important information and useful tips on the operation of your printer.

1.3 IMPORTANT SAFETY INSTRUCTIONS

General safety instructions that must be observed to use the equipment safely are explained below.

- Do not place the printer in the following areas. Doing so may result in the printer tipping or falling over and causing injury.
 - Unstable surfaces.
 - Angled places.
 - Areas subject to vibration by other equipment.
- Do not stand on, or place heavy objects on your printer. Doing so may result in the printer tipping or falling over and causing injury.
- Do not cover the ventilation hole of your printer with cloth, such as a blanket or a table cloth. Doing so could obstruct the ventilation and cause fire.
- Do not place the printer in humid and dusty areas. Doing so may result in an electrical shock or fire.
- Do not use a damaged power cable. Doing so may result in an electrical shock or fire.
- Do not attempt to plug in electrical plugs with wet hands. Doing so may result in an electrical shock.
- Do not connect earth cables in the following areas.
 - Gas pipesDoing so may cause fire or an explosion.
 - Earth terminals for telephone line or lightning rodDoing so may cause a large flow of voltage if lightning occurs.
 - Water pipes or faucetsIf there is a plastic part in the pipe, the earth will not work properly.
- The ink used in the product contains an organic solvent (CYCLOHEXANONE). It is flammable and so an open flame is prohibited in the area. In a dry environment, static electricity can cause ignition, so before handling the ink, jet wash fluid or waste liquids, touch a metallic object first to remove static electricity from your body. Do not come near materials having static electricity, and take appropriate measures against static electricity.
- Do not insert or drop metal or inflammable objects into openings, such as ventilation outlets. This may cause electrical shock or fire.

- Stop using your printer if a liquid has been spilled into it. This may cause an electrical shock or fire. Switch the printer OFF as soon as possible, unplug the power cord, and contact your local MUTOH dealer.
- Be sure to use the attached cable. Otherwise, an electrical shock or fire may occur.
- Be sure to use the specified voltage (AC 100 V- 120 V or AC 220 V - 240 V). Otherwise, an electrical shock or fire may occur.
- Use electricity directly from a power outlet (AC 100 V- 120 V or AC 220 V - 240 V). Do not put many loads on one electrical output. Otherwise, heat may be generated and cause fire.
- Be sure to use an outlet with an earth terminal and use the terminal correctly. Otherwise, electrical shocks or fire may occur.
- The inks used in this product contain an organic solvent (CYCLOHEXANONE). Make sure to follow the industrial waste disposal laws and ordinances of your local governments.
It is necessary to install a local ventilation unit, push/pull type ventilation unit, or a total ventilation unit to perform adequate ventilation.
- If ink or jet wash fluid has been swallowed, do not make the person throw up, but immediately call a doctor and a poison management centre.
If there has been contact with eyes or inhalation, it may cause poisoning. Follow the cautions and procedures labelled on the ink and jet wash bottles, and take action immediately.
- The waste fluid from the printer is a waste oil (waste ink) of industrial waste. Proper waste fluid disposal according to industrial waste disposal laws and ordinances of your local governments are required.
- Follow the instructions below when handling the power cable.
 - Do not modify the cable.
 - Do not put heavy objects on the cable.
 - Do not bend, twist, or pull the cord.
 - Do not wire the cable near equipment that generates heat.
- Follow the instructions below when handling the power plug. Otherwise, fire may occur.
 - Wipe away dust and any other residue before inserting the plug.
 - Ensure that the plug is firmly inserted as far as it can go.
- When handling the foot switch, be aware of the following:
 - Do not place anything heavy on the foot switch.
 - Do not pull or bend the cable of the foot switch with force.
 - Do not place the foot switch near thermal devices.
- Be careful not to get your fingers caught in the lid when opening or closing the front cover and the maintenance cover.
- The refilled ink or jet wash fluid should not exceed the upper limit (about 2 litres) of the main tank. If it exceeds the upper limit, the ink will leak out and cause printer problems.
- When filling the main tank with ink, make sure not to make a mistake with the ink colour and the ink tube colours.
- Filling the tank with the wrong colour ink can make the print head useless.
- During printing, do not touch the media guide. The media guide is hot, and may cause burns if touched.
- During the winding operation, make sure to keep hands and fingers off moving parts.
- Be careful when cutting roll media, incorrect handling can result in injury to the hands and fingers from the razor blade.
 - When holding the media, do not place fingers over the media cut groove.
 - Move the razor blade slowly along the media cut groove.
- Do not use jet-wash fluid, thinner, benzene, alcohol, or other active agents except for the following parts. Doing so may result a malfunction in the product.
 - Inside the maintenance cover.
 - Print head surface.
- Be careful not to spill water inside the printer. Doing so may result in a short circuit.

- Never open the covers fixed with screws. Doing so may result in an electrical shock or a malfunction of the printer.
- Be careful when cleaning the print head, incorrect cleaning may result in clogging of the nozzles.
 - Do not touch the print head surface with bare hands.
 - Wipe out ink on the print head wiper every time when ink has been adhered to it.
- Do not tilt the printer, put it against a wall, or turn it upside down. Doing so may cause ink leakage inside the printer. Also, movement after transport is not covered by the warranty.
- Have two or more people unpack and transport the printer.
- When lifting the printer out of the packing box, be sure to remove the vinyl cover first, then grab the holding sides of the printer. Lifting the printer with the vinyl cover on may cause your hands to slip and as such drop or damage the printer.
- Ensure that the plug has been disconnected from the power socket when it is not to be used for a long time.
- Earth wires must be connected to wires or terminals that fulfil the conditions below.
 - Earth terminals of power socket.
 - Earth wires with copper morsel that is at least 650 mm under ground.
- When refilling ink or jet wash fluid, always wear the protective gloves supplied with the unit.
- The ink and jet wash fluid are poisonous. If skin contact occurs, wash with soap water and rinse well.
- Be sure to close the lid of the main tank tightly. If the lid is not tightly closed or loose, it will cause a defect when purging, loading or unloading the ink.
- When performing the following work, always perform work with 2 people.
 - Placement of the roll media.
 - Setting of the roll media.
 - Setting of the winding unit.
- When performing the head cleaning:
 - Put on the gloves supplied with the printer.
 - Only use the print head wiper supplied with the printer. Otherwise the nozzle may become clogged.
- Immediately after printing, the media guide and the platen are very hot. Perform work after the media guide and the platen have cooled off.
- When cleaning the waste fluid tray, always wear the protective gloves supplied with the unit.
- When cleaning the print head surface, always wear the protective gloves supplied with the unit.
- When performing cleaning for long-term storage, always wear the protective gloves supplied with the unit.
- Be sure to switch the printer OFF and unplug the power cord before cleaning.
- Keep the printer horizontally during transportation.
- Before installing options, always perform the following.
 - Switch OFF the printer.
 - Remove the power source plug from the outlet.
 - Remove all cables connected to the printer.
 - Failure to do so could result in damage to the printer or your computer.
 - Touch a metallic section of the product to remove any static electricity in your body. The electronic components can be damaged from static electricity.
- When installing options, do not touch the elements on the circuit board. The elements on the boards can be very hot, and can cause burns.
- Make sure that the distributed power cable is used. Use of a different power cable may result in electric shock or fire.

- Be careful of the following when handling the power cable.
 - Do not make any modifications to the power cable.
 - Do not place anything heavy on the power cable.
 - Do not bend, twist, or pull the power cable.
- Do not wire the power cable near an equipment that generates heat.
- After the print head cap is removed from the printer, move it into the accessory box. Discharge the waste fluid from the print head cap enough so it would not spill.
- Keep the print head cap away from the dust and other contaminants; otherwise the print head may become clogged.
- When opening/closing the maintenance cover, be careful not to get your fingers caught in the lid.
- Do not cut a poly-knit wiper over the print head cap. Otherwise the print head may become clogged with lint.
- Be sure to remove pilling and lint on the cutting edge of poly-knit wiper. Otherwise the print head may become clogged.
- When the cap sponges and the poly-knit wipers become dry, always replace them with new ones. Otherwise the print head may become clogged.
- Keep the print head cap clean, otherwise the print head may become clogged.
- When switching the power OFF, always install the print head cap. Or the nozzle may become clogged.
- Carefully open/close the ink box cover to avoid finger pinching.
- Be sure not to pinch your fingers while opening and closing the front cover.
- When connecting the network interface, ensure the following precautions:
 - Never touch the connection terminals.
 - Do not connect different shaped cables
- Wrong handling may cause an electric shock and/or fire.
- Immediately after printing, the media guide and the platen are very hot. Perform work after the media guide until the platen have cooled off.
- When the sponge of the spitting box has been replaced, be careful for the waste fluid not to be spilled out.
- If the waste fluid comes into contact with the grid roller, the surface of the grid roller will be damaged. And the media feed function may be affected.
- Be sure to switch the printer OFF and unplug the power cord before cleaning.
- Do not use the jet-wash fluid, thinner, Benzene, alcohol, or other active agents except for the following parts. Doing so may result a malfunction in the product.
 - Inside the maintenance cover
 - Print head surface
- Be careful not to spill water inside the printer. Doing so may result in a short circuit.
- Never open the covers fixed with screws. Doing so may result in an electrical shock or a malfunction in the printer.

1.4 WARNING LABELS

The handling, attachment locations, and types of warning labels are explained below. Warning labels are attached to areas where care should be paid. Read and understand the positions and contents thoroughly before performing your work.

1.4.1 Handling the warning labels

Be sure to note the following when handling the warning labels.

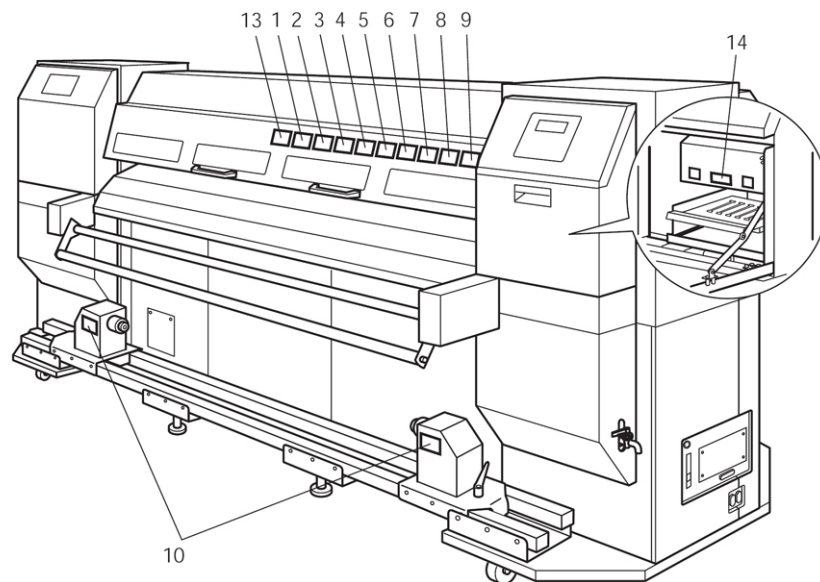
⚠ Notes ⚠

- Make sure that all warning labels can be recognized. If text or illustrations cannot be clearly seen, clean the label.
- When cleaning warning labels, use a cloth with water or neutral detergent. Do not use a solvent or gasoline.
- If a warning label has been damaged, lost, or cannot be recognized, replace the label. When replacing warning labels, contact your MUTOH local dealer.

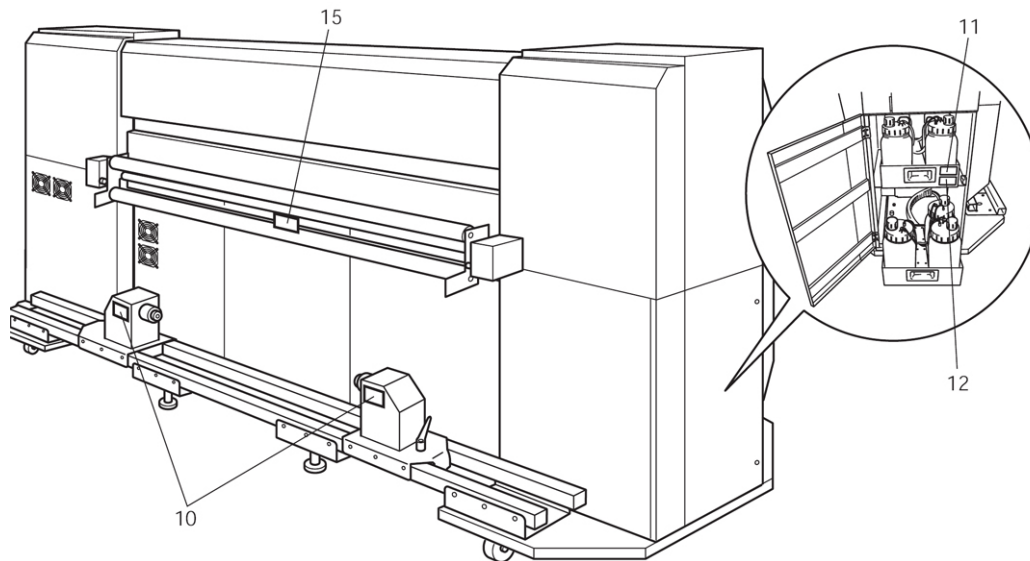
1.4.2 Locations and types of warning labels

The locations of warning labels are shown below.

Front




Back



No.	Type
1	<p>⚠ CAUTION 주의 주의</p> <ul style="list-style-type: none"> ◆ If the printer will not be used for 7 days or more, always perform long-storage cleaning. Leaving the printer unused for a long period without performing long-storage cleaning can cause the ink in the print head nozzles to solidify and lead to print head faults. ◆ 7일 이상 인쇄기를 사용하지 않을 경우에는 반드시 장기보존 클리닝을 실시하여 주십시오. 장기보존 클리닝을 실시하지 않고 방치해두면 헤드 노즐 내부의 잉크가 굳어져 헤드 고장의 원인이 됩니다. ◆ 7天以上不使用打印机时, 请务必进行长期保管清洗。任其放置, 会引起墨水喷嘴内的墨水凝固, 导致喷头故障。
2	<p>⚠ CAUTION 주의 주의</p> <ul style="list-style-type: none"> ◆ Always attach the caps when the power is switched off or a serious error or fault occurs. Leaving the caps off can cause the ink in the print head nozzles to solidify and lead to print head faults. ◆ 전원 OFF일 때나 심한 트러블이 발생한 때에는 반드시 캡을 장착해 주십시오. 그대로 방치해두면 헤드 노즐 내부의 잉크가 굳어져 헤드 고장의 원인이 됩니다. ◆ 当电源关闭或发生重大故障时, 请务必装上防护罩。任其放置, 会引起墨水喷嘴内的墨水凝固, 导致喷头故障。
3	<p>⚠ CAUTION 주의 주의</p> <ul style="list-style-type: none"> ◆ Do not leave the printer's front cover or flushing box cover open for 10 minutes or longer during printing or standby. Routine ink ejection stops, which can cause the ink in the print head nozzles to solidify and lead to print head faults. ◆ 인쇄중이나 대기중에는 기계의 프런트 커버와 플래싱 박스의 커버를 10분 이상 열어둔 채 놓아두지 말아 주십시오. 정기 토출이 정지되고 헤드 노즐 내부의 잉크가 굳어져 헤드 고장의 원인이 됩니다. ◆ 在印刷或待机时, 机器的前罩和冲洗槽盖的打开时间请勿超过10分钟。否则会导致定期喷墨停止, 墨水喷嘴内的墨水凝固, 造成喷头故障。

4	<div data-bbox="531 185 1142 472"> <p>⚠ CAUTION 주의 주의</p> <ul style="list-style-type: none"> ◆ Do not direct the airflow from a fan or air-conditioner straight onto the printer. Breezes can cause the ink in the print head nozzles to solidify and lead to print head faults and can also interfere with ink ejection so that optimum printing results are not obtained. ◆ 기계에 송풍기나 공기 조절장치의 바람을 직접 대지 말아 주십시오. 바람에 의해 헤드 노즐 내부의 잉크가 굳어져 헤드 고장의 원인이 되거나 잉크 토출에 영향을 끼쳐 만족스러운 인쇄 결과를 얻을 수 없는 경우가 있습니다. ◆ 请勿将鼓风机和空调装置直接对准机器送风。冷风会使墨水喷嘴内的墨水凝固，造成喷头故障，以致影响喷墨而得不到理想的打印效果。 </div>
5	<div data-bbox="531 481 1142 768"> <p>⚠ CAUTION 주의 주의</p> <ul style="list-style-type: none"> ◆ When a winder is used, secure the media in the paper container for the winder before printing. If you secure the media during printing, optimum printing results may not be obtained due to variation in the media transport conditions. ◆ 권취 사용시에는 인쇄하기 전에 권취 용지관에 미디어를 고정시킨 뒤 실시하여 주십시오. 인쇄 도중에 고정시키면 미디어의 반송 조건이 변하기 때문에 만족스러운 인쇄 결과를 얻을 수 없는 경우가 있습니다. ◆ 使用卷取时，请在印刷前将介质固定于卷取用纸筒上以后再进行操作。在印刷中进行固定时，由于介质的运送条件发生变化，会出现不理想的印刷结果。 </div>
6	<div data-bbox="531 777 1142 1064"> <p>⚠ CAUTION 주의 주의</p> <ul style="list-style-type: none"> ◆ When you are using a media such as tarpaulin paper that becomes tacky when heated, apply tack-prevention mesh to the paper guides before printing. Paper jams caused by tacky media can result in damage to the printer mechanism. ◆ 방수포 등 열을 받으면 점착성이 생기는 미디어를 사용할 경우에는 페이퍼 가이드에 부착 방지망을 장착하고 인쇄해 주십시오. 달라붙어 막힘 현상이 발생하고 기계가 파손될 우려가 있습니다. ◆ 使用因油布等的热量而产生粘性的介质时，请将防粘网安装在导纸板后再进行印刷。因粘连而发生卡纸时，有可能会损坏机器。 </div>
7	<div data-bbox="531 1072 1142 1359"> <p>⚠ CAUTION 주의 주의</p> <ul style="list-style-type: none"> ◆ Do not touch the paper guides during data transfer, during printing or immediately after printing. Depending on the drying heater temperature setting, the paper guides may become hot and could cause burns. ◆ 데이터 송신중 · 인쇄중 · 인쇄 직후에는 페이퍼 가이드를 만지지 말아 주십시오. 건조 히터의 온도 설정으로 인해 페이퍼 가이드가 고온으로 되기 때문에 화상을 입을 우려가 있습니다. ◆ 请勿触摸正在发送数据、印刷及刚印刷后的导纸板。干燥加热器的温度设定，会造成导纸板高温，有烫伤的危险。 </div>
8	<div data-bbox="531 1368 1142 1655"> <p>⚠ CAUTION 주의 주의</p> <ul style="list-style-type: none"> ◆ Do not touch the paper guides during data transfer, during printing or immediately after printing. Depending on the drying heater temperature setting, the paper guides may become hot and could cause burns. ◆ 데이터 송신중 · 인쇄중 · 인쇄 직후에는 페이퍼 가이드를 만지지 말아 주십시오. 건조 히터의 온도 설정으로 인해 페이퍼 가이드가 고온으로 되기 때문에 화상을 입을 우려가 있습니다. ◆ 请勿触摸正在发送数据、印刷及刚印刷后的导纸板。干燥加热器的温度设定，会造成导纸板高温，有烫伤的危险。 </div>
9	<div data-bbox="531 1664 1142 1935"> <p>CAUTION VORSICHT ATTENTION</p> <ul style="list-style-type: none"> > Do not open the front cover or touch the media during printing. This will result in poor image quality. > If no printing is to be done for some time, remove the media and put the pressure rollers in the up position. Otherwise the media may lift up and become wrinkled and you will not be able to obtain good printing results. > Öffnen Sie während des Druckens die Frontabdeckung nicht und berühren Sie das Druckmaterial nicht. > Wenn Sie während längere Zeit den Drucker nicht benutzen, nehmen Sie das Druckmaterial heraus und stellen Sie die Druckrollen in die obersten Position. Sonst kann sich das Druckmaterial aufheben und zerknittern und demzufolge erzielen Sie keine gute Druckergebnisse mehr. > N'ouvrez pas le couvercle quand l'imprimante est en train d'imprimer. Ne touchez pas non plus le papier afin d'éviter que la qualité s'aggrave. > Si vous ne comptez pas imprimer pendant un certain temps, retirez le papier et mettez les rouleaux de pression en position levée. Sinon, le support risque de se soulever et de se froisser et vous n'obtiendrez pas de bonne qualité d'impression. </div>

10	<div data-bbox="534 185 1141 423"> <p>⚠ CAUTION 주의</p> <ul style="list-style-type: none"> ◆ When the printer is working with the media tube mounted, please be careful not to let your clothing hair or fingers get caught between the media tube and the rollers, otherwise you may be injured. ◆ 지관 장착 시나 프린트 동작 중에는 지관 와 롤러 의 사이에 의류, 머리카락, 손가락 등이 말려 들어가지 않도록 해 주십시오. 말려들어가 다칠 우려가 있습니다. </div>
11	<div data-bbox="534 432 1141 777"> <p>⚠ CAUTION</p> <ul style="list-style-type: none"> ◆ Always use genuine, exclusive PJ-2646NXE ink and jet wash. ◆ Always use exclusive PJ-2646NXE ink tanks, jet wash tanks and waste liquid tanks. ◆ If the user changes and uses the above, there is a risk of unpredictable problems such as ink blockage and deterioration of weatherability. Mutoh gives no warranty with respect to such problems. </div>
12	<div data-bbox="534 790 1141 1135"> <p>⚠ 주의</p> <ul style="list-style-type: none"> ◆ 반드시, PJ-2646NXE전용 순정잉크, Jet Wash를 사용해 주세요. ◆ 반드시, PJ-2646NXE전용 잉크통, Jet Wash통, 폐액통을 사용해 주세요. ◆ 위와 같은 내용을 고객이 변경 사용하였을 경우, 잉크에 의한 헤드막힘 현상, 잉크 내후성의 악화등과 같은 예측할 수 없는 문제가 발생할 우려가 있습니다. 당사에서는 이러한 문제발생에 대해서 일체 책임을 지지 않습니다. </div>
13	<div data-bbox="534 1149 1141 1431"> <p>⚠ CAUTION</p> <ul style="list-style-type: none"> ◆ When opening or closing the front cover, be careful not to let your fingers get caught. <p>※ Other wise you may be injured.</p> </div>
14	<div data-bbox="534 1440 1141 1644"> <div data-bbox="544 1453 722 1630">  <p>Steel belt</p> </div> <div data-bbox="735 1453 1131 1630"> <p>⚠ Caution Vorsicht Attention</p> <ul style="list-style-type: none"> ◆ To avoid injury, do not touch the edge of the steel belt. ◆ Um Verletzungen zu vermeiden, bitte den Stahl-Antriebsriemen nicht berühren. ◆ Pour éviter des blessures, ne pas toucher la courroie de transmission en acier. </div> </div>

1.5 OPERATION LABELS

This Item describes the operation labels including their types and attaching positions. The operation labels are attached on the product to provide the brief instructions for the important operations. Learn the instructions and the attaching positions before operation.

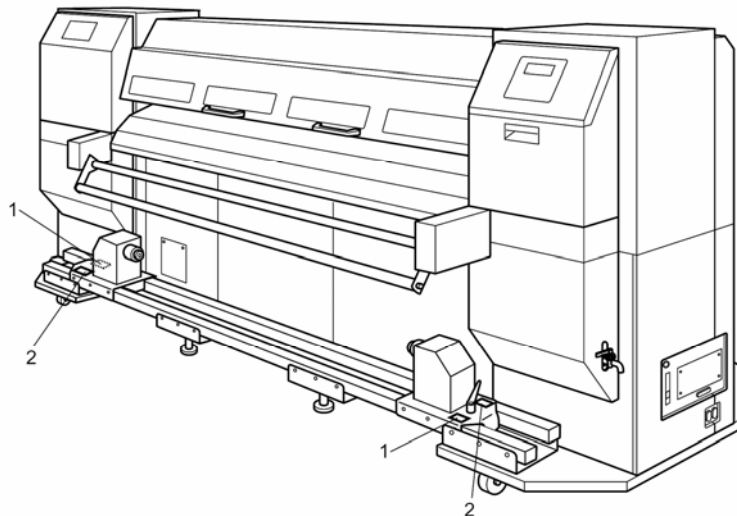
1.5.1 Handling notices

⚠ Notes ⚠

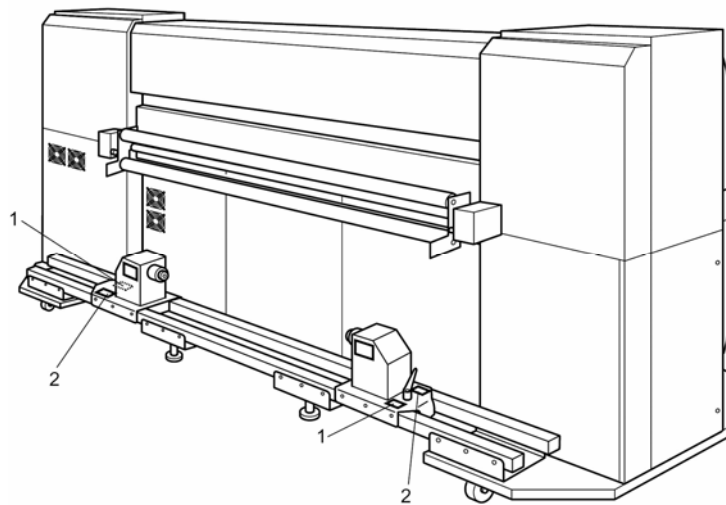
- Ensure that all the operation labels clearly can be read. If any part such as a character or an illustration is not clear, clean off dirt from the label.
- To clean off dirt from the operation labels, use cloths, water, or neutral detergent. Do not use organic solvent or gasoline.
- If the operation labels have been damaged, lost, or became unreadable for other reasons, replace them with new ones.
- For replacement, contact your local service centre (Refer to: "Product information service").

1.5.2 Label types and attaching positions

Front



Back



No.	Operation label type
1	<div data-bbox="660 882 1007 992" style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold; font-size: 24px;">LOCK</div>
2	<div data-bbox="660 1005 1007 1115" style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold; font-size: 24px;">UNLOCK</div>

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2 PRODUCT OVERVIEW

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2.1 FEATURES

The different features of the printer are explained below.

(1) High speed output

With the newly designed high-speed print head.

- The Osprey 75 enables printing up to the 1920 mm wide image.
- The Osprey 102 enables printing up to the 2500 mm wide image.
- The Osprey 130 enables printing up to the 3300 mm wide image.

(2) Outstanding weather resistance

With the specially developed solvent-type ink, the output product can last up to 3 years even without lamination. Not only the delivery time is reduced, but the total cost is reduced as well.

(3) Wide variety of compatible media

The adjustable head height and the variable pressure with lever accept various types of sheets in the thickness range of 0.08 to 1.0 mm, including Terpolin, cloth, and marking film.

(4) Vibrant Colour Reproduction

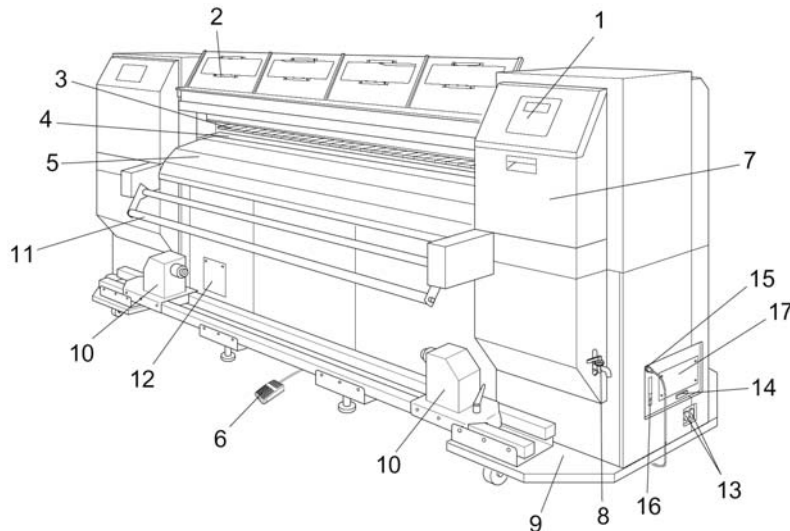
To reproduce clear and vibrant colours, the Osprey uses 6 colours. This model uses 2,000cc ink tanks, allowing continuous operation, and raising productivity.

(5) Effective usage of media

A JOG feature is provided to allow settings of the printing position as required. Because printing can be performed on media that has already been printed on, excess space can be used effectively.

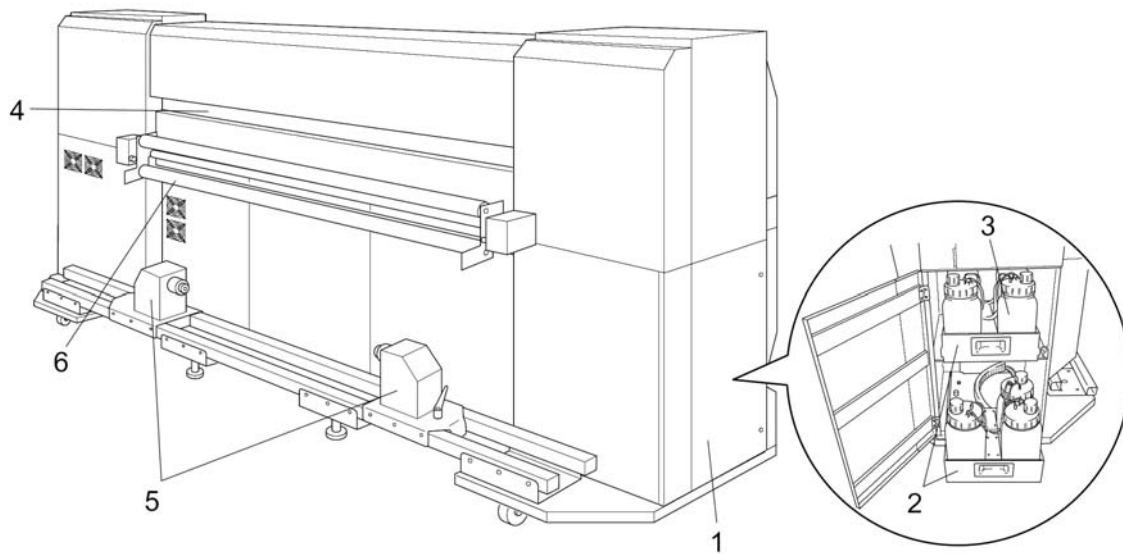
2.2 PARTS NAME AND FUNCTIONS

2.2.1 Front section



No.	Name	Function
1	Operation panel	This panel is used to set operational conditions, the status of the printer, and other functions. (Refer to : Operation panel)
2	Front cover	This cover keeps the operator safe from the drive parts of the printer while it is operating. Open and/or close the cover only when performing the following operations. <ul style="list-style-type: none"> Media setting and replacement Cleaning inside the printer Media jamming
3	Pressure roller	Set inside the front cover. This roller is used to press the media from above and keep it flat when printing.
4	Platen	Set inside the front cover. There is an ink drying device built in. On the surface, there is a cutter groove for paper cutting.
5	Media guide	This is used to feed the media smoothly when setting the media and when printing. There is an ink drying device built in.
6	Foot switch	This switch is used to raise and lower the pressure roller.
7	Maintenance cover	This cover protects the user from the internal components of the product. Opened during the following conditions: <ul style="list-style-type: none"> When switching the unit ON or OFF When cleaning the print head surface. When cleaning the print head inside the cover. There is a waste fluid tray to collect waste fluid from the print head.
8	Waste fluid valve	Opened when discharging waste fluid from the waste fluid tank. This is normally closed.
9	Stand	This stand is used to install the printer on a flat surface.
10	Winding unit	Winds and collects the printed media.
11	Cushioning roller	Used to guide the printed media to the winding unit.
12	3-way cock cover	Cover to protect operators from the internal mechanism of the product. Open when the print head is cleaned. Normally this cover should be closed.
13	AC inlet	Insert the power cable plug.
14	Interface connector	Connector to connect Centronics Interface.
15	Foot switch connector	Connector to set foot switch cable.
16	Network internet face connector	Connector to connect Ethernet cable.
17	Hard disk slot	For attaching the optional hard disk. When the hard disk is not used, close the cover.

2.2.2 Rear section



No.	Name	Function
1	Ink bottle cover	Cover to protect operators from the internal mechanism of the product. Opens/closes when the ink and jet wash liquid is filled in.
2	Tank tray	Used to hold the main tank to the product.
3	Main tank	Tanks for ink and jet wash liquid. The following number of tanks should be set to the tank tray. Osprey 75/102/130 : 7 tanks
4	Media feed slot	This is the media feed slot for placing the media during the media setting procedure.
5	Feed unit	This is the device which sets the media, and feeds it to the printing position.
6	Tension roller	Set the printing intervals when perform printing by media feed compensation. When the tension roller is lifted up, the feeding device feeds the media automatically.

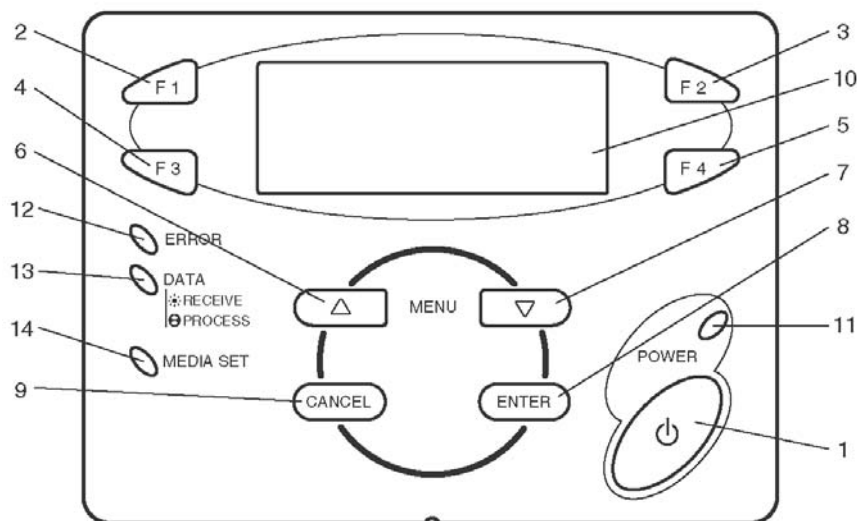
2.2.3 Operation panel

The operation panel is used to set operational conditions, displays the status of the printer, and sets other functions.

The names and functions of the operation keys and status lamps are explained below.

⚠ Notes ⚠

- See the sections below on how to use the operation panel.
- When setup menu using the operation panel: "Menu setup on the operation panel"
- When setting functions using the operation panel: "Operating from the operation panel"



2.2.3.1 Operation Keys

⚠ Notes ⚠

- Some keys have multiple functions and names depending on the printer status (normal or setup menu display). Refer to: "Printer status" for more details.

No.	Name	Normal	setup menu display
1	[POWER] key	Switches the printer ON and OFF.	Switches the printer ON and OFF.
2	[F1] key	Executes the function assigned to F1.	Executes the function assigned to F1.
3	[F2] key	Executes the function assigned to F2.	Executes the function assigned to F2.
4	[F3] key	Executes the function assigned to F3.	Executes the function assigned to F3.
5	[F4] key	Executes the function assigned to F4.	Executes the function assigned to F4.
6	[MENU ▲] key	Changes the LCD monitor display to the setup menu status.	Changes the menu in reverse order.
7	[MENU ▼] key	Changes the LCD monitor display to the setup menu status.	Changes the menu in forward order.
8	[ENTER] key	Changes the LCD monitor display to the print mode display.	Determines the new parameter value and changes the LCD monitor display to the next menu.
9	[CANCEL] key	–	Cancels the new parameter value and returns to the previous hierarchy menu.

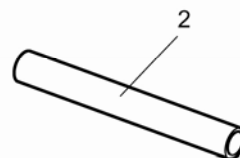
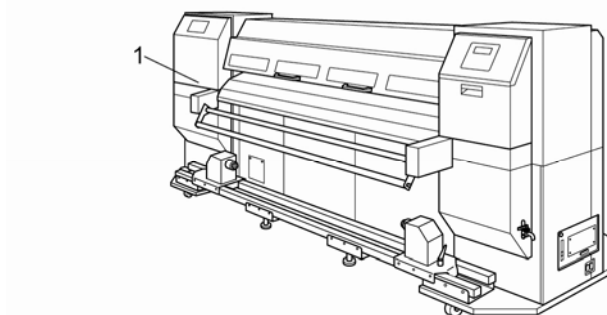
(2) LCD monitor and status lamp

No.	Name	Colour	Status	Function
10	LCD monitor	–	–	This monitor displays the operation status and error messages of the printer.
11	POWER lamp	Green	ON	The printer is ON.
			OFF	The printer is OFF.
12	ERROR lamp	Red	Flashing	An error has occurred. The contents will be displayed on the LCD monitor.
			OFF	Either there is no error in the printer or the power is OFF.
13	DATA lamp	Orange	ON	The printer is receiving print data.
			Flashing	The printer is analyzing received data.
			OFF	The printer is waiting to receive print data.
14	MEDIA SET lamp	Orange	ON	<ul style="list-style-type: none"> • The pressure roller is in the release position. • Media has not been set.
			OFF	<ul style="list-style-type: none"> • The pressure roller is in the secured position. • The media has been set.
15	ROLL lamp	–	–	Disuse
16	SHEET lamp	–	–	Disuse

2.3 IN-THE-BOX CONTENT

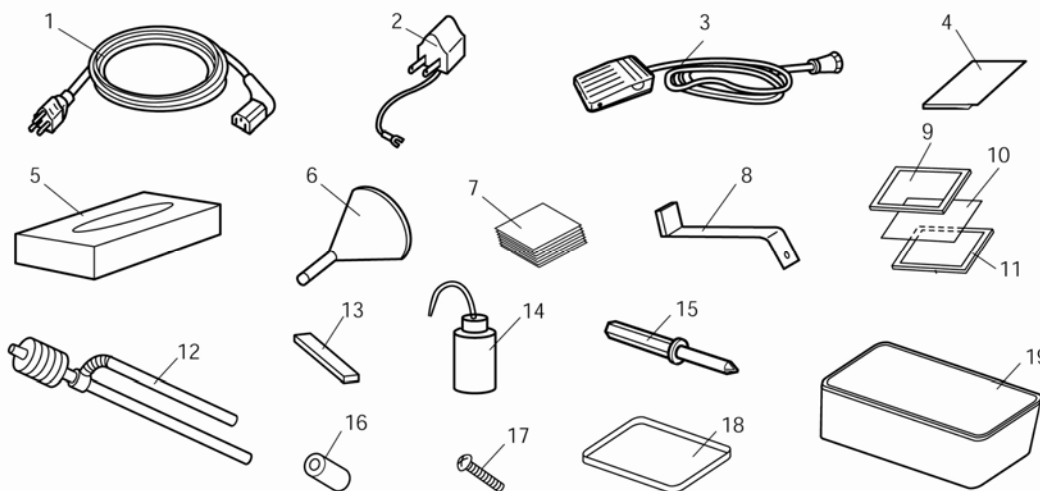
After unpacking the packaging box, inspect to make sure that the unit is not damaged, and that all necessary parts are present.

2.3.1 Packaging box of the main unit



No.	Name	Qty	No.	Name	Qty
1	Main unit, stand, winding unit	1 set	2	Media tube (for winding unit)	1

2.3.2 Accessories packaging box



No.	Name	Qty	No.	Name	Qty
1	Power cable	4	12	Hand pump	1
2			13	Cap Sponge	6
3	Foot switch	1	14	Wash bottle	1
4	Media holder plate	2	15	Screwdriver	1
5	Gloves	1 box	16	Plastic spacer	2
6	Funnel	1	17	Screw (for Plastic spacer)	2
7	Polyknit wiper	1 box	18	Tray	1
8	Print head wiper	1	19	Accessories box	1
9	Magnet sheet (white)	1			
10	Panel cover	10			
11	Magnet sheet (black)	1			

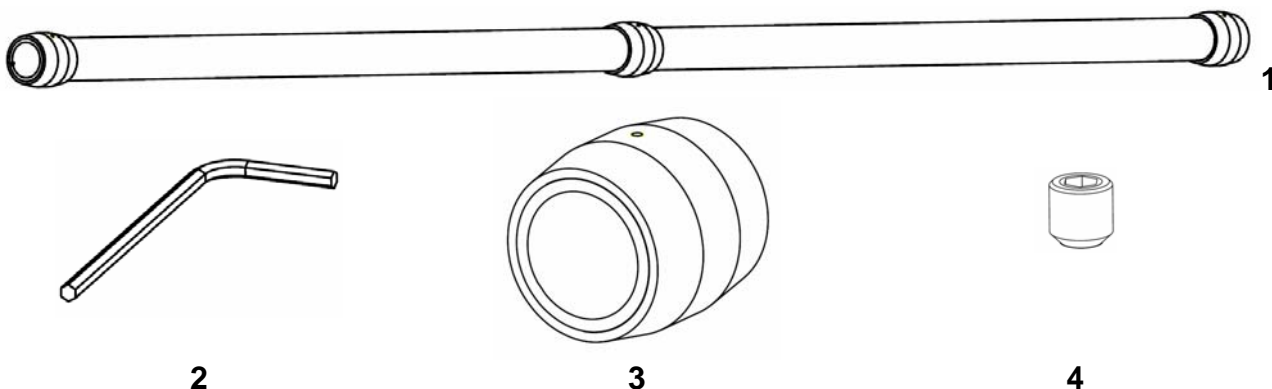
2.3.3 Starterkit



No.	Name	Qty
1	ROHS HDD 7445 – 40 Gbyte	1
2	Spout 5l	2
3	CD Users Guide	1
4	CD getting started	1
5	User's Guide Osprey	1
6	Dome Label Osprey	1
7	Box 440 ml cassettes	8
8	Operation manual (EU version)	1
9	Installation manual (EU version)	1

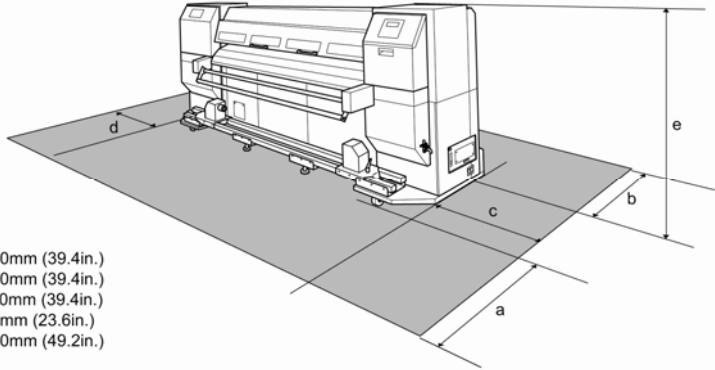
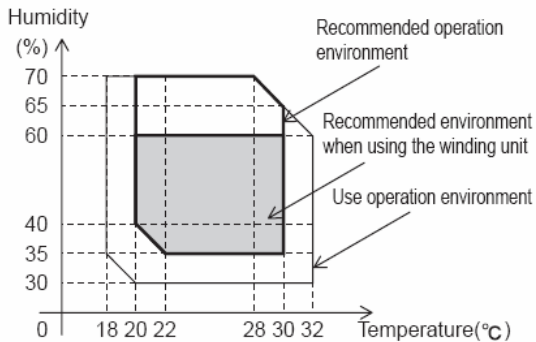
2.3.4 Core Brace Set

No°	Item	#
1	Media Core Brace (Shaft + 3 spacers + screws)	2
2	Hexagon wrench 2 mm to tighten the spacers	1
3	Spacer media shaft diameter 74	6
4	Hex set screw M4x4	6
5	Instruction sheet	1



2.4 INSTALLATION REQUIREMENTS

Be sure to read and understand the safety warnings before handling the printer.

Area		<p>12.6m² (146ft²) or larger. Frontage of 4.7m (15.7ft) or greater.</p>  <p> a=1000mm (39.4in.) b=1000mm (39.4in.) c=1000mm (39.4in.) d=600mm (23.6in.) e=1250mm (49.2in.) </p>
Floor loading capability		2940Pa (300kg/m ²) or over
Electrical	Voltage	AC100V – 120V / AC220V – 240V ±10%
	Frequency	50/60Hz±1Hz
	Capacity	AC100V – 120V: 15A or more AC220V – 240V: 7.5A or more
Environmental	Operational conditions	 <p>Humidity (%)</p> <p>Temperature(°C)</p> <p>Recommended operation environment</p> <p>Recommended environment when using the winding unit</p> <p>Use operation environment</p>
	Storage environment	Temperature: –10°C (14F) to 60°C (140F) Humidity: 20% to 80% without condensation

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3 BASICS

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3.1 SWITCHING THE PRINTER ON/OFF

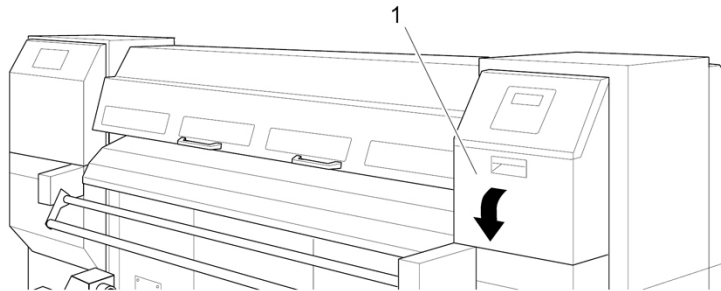
3.1.1 *Switching the power ON*

Be sure to read and understand the safety warnings before handling the printer.

The procedure consists of 2 parts.

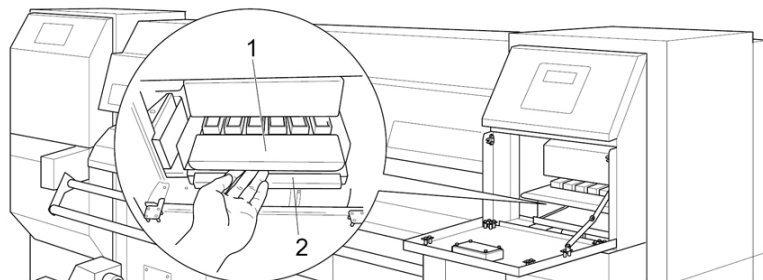
1. Start up the machine:

Step 1 : Open the maintenance cover.



No.	Name
1	maintenance cover

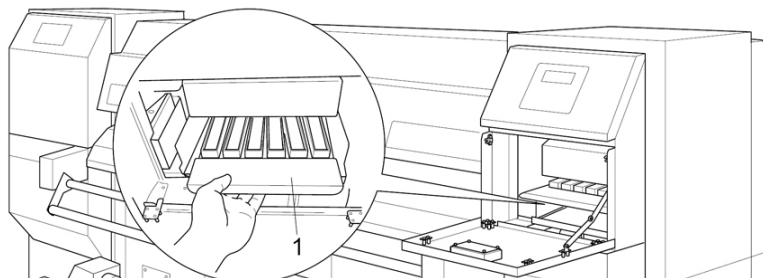
Step 2 : Hold the front of the print head cap (1) and put the purge plate (2) down.



No.	Name
1	Print head cap
2	purge plate

Step 3 : Tilt the print head cap to eliminate the pooled liquid including jet-wash fluid.

Step 4 : Remove the print head cap.



No.	Name
1	Print head cap

Step 5 : Lift the purge plate to make it operational.

⚠ Notes ⚠

- The purge plate must be placed on the purge stand whenever the power is ON, except when head cleaning is performed. Refer to: "Head cleaning"
- If waste fluid comes into contact with the inside of the product, the product may malfunction.

Step 6 : Close the maintenance cover.

Step 7 : Press the [POWER] key on the control panel.

- The POWER lamp on the control panel will light green.
- The unit will initial start up operations.
- The following message is displayed on the operation panel.



⚠ Notes ⚠

- When switching ON the printer and the shelf life of a part comes to an end, the printer will notify it in this stage of the start up sequence.

⚠ Notes ⚠

- If there are any problems during the initial start-up operation, the unit will display a message on the control panel, and the operation may stop.
- If the operation stops, refer to "Troubleshooting", and take the appropriate measures.

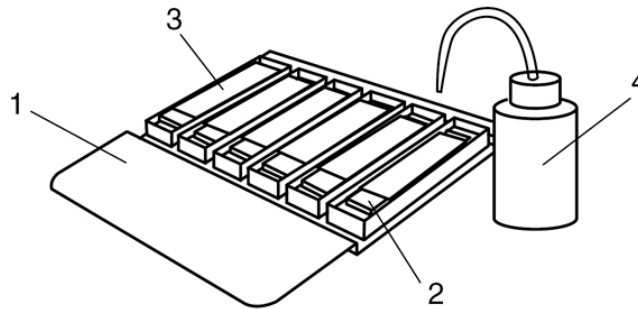
Step 8 : After confirming the removal of the print head cap, press the [ENTER] key on the operation panel.

⚠ Notes ⚠

- After 3 seconds from the launch of the initial start-up operation, the initialization of the hard disk installed in the unit is performed for about 10 seconds.
- During this operation,
 - The operation panel will not work even if pushing the [ENTER] key.
 - The display will not change even if the parts' life cycle is displayed.

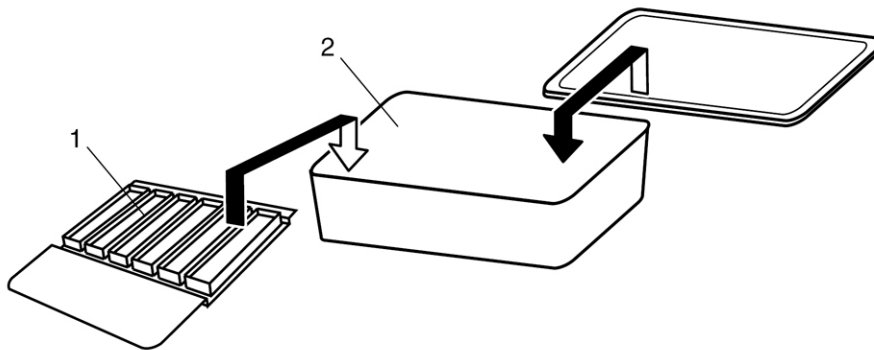
2. Store the head cap while printing:

Step 1 : Soak the sponges and poly-knit wipers of the print head cap with the jet-wash fluid using the wash bottle.



No.	Name
1	Print head cap
2	Cap sponge
3	Poly-knit wiper
4	Wash bottle

Step 2 : Keep the print head cap in the accessory box while printing.



No.	Name
1	Print head cap
2	Accessory box

3.1.2 Switching OFF the printer

Be sure to read and understand the safety warnings before handling the printer.

The procedure consists out of 3 parts.

1. Start the “power down” sequence:

Step 1 : Go to the “Testprinting” menu, and perform a nozzle check print.

Step 2 : Verify if there are any missing dots, or if the printer is faint printing.

⚠ Notes ⚠

- If printing quality declines, or if there are missing dots in the nozzle check print, the print heads need to be cleaned. If you switch OFF the printer without head cleaning, the clogged nozzle may not restore. Refer to: “Head cleaning” to perform a head cleaning.

Step 3 : Verify the following regarding the operational condition of the product:

- There is no printing operation being performed.
- The control panel is in a normal status.

Step 4 : Push the [POWER] key of the control panel, to switch OFF the printer.

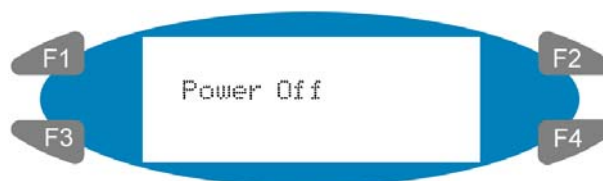
⚠ Notes ⚠

- The power is ON if the control panel displays the following conditions:
 - The [POWER] key is in the pushed in condition
 - The POWER lamp is lit (green).
- Press the [POWER] key again to switch the power OFF.

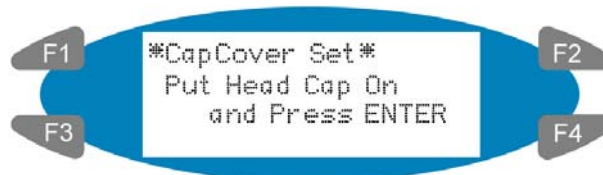
Step 5 : The following message is displayed on the operation panel for 3 seconds. See image below.

⚠ Notes ⚠

- If pushing the [POWER] key on the operation panel by mistake, push the [POWER] key again while the following message is displayed. See below for the message.



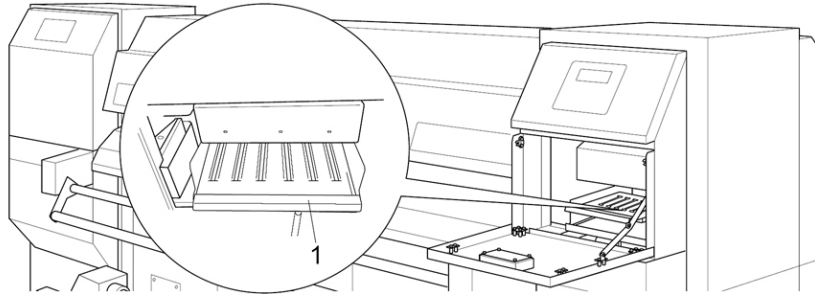
- The printer will perform the power OFF operation.
- The following message is displayed on the operation panel:



2. Install the print head cap:

Step 1 : Open the maintenance cover.

Step 2 : Put the purge plate down.

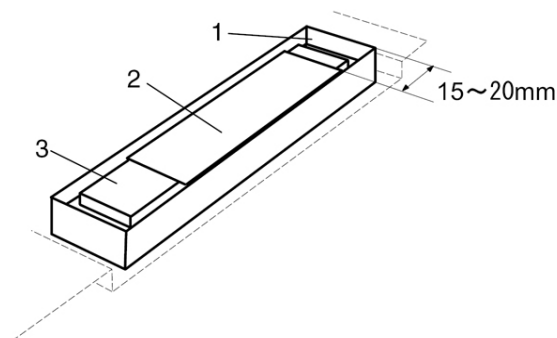


No.	Name
1	Purge plate

Step 3 : Cut a poly-knit wiper into three equal pieces, and place them on the cap sponges.

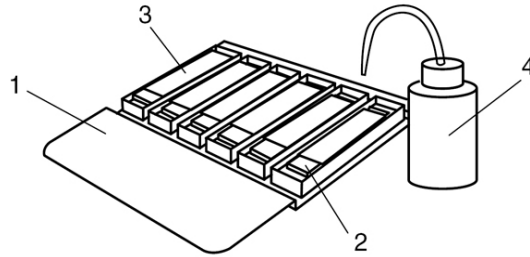
Notes

- Place a piece of poly-knit wiper on the cap sponge as in the figure below so that the piece fits the nozzle surface of the head.
- Use the jet-wash fluid to wash the poly-knit wipers.
- Replace the poly-knit wiper in the following cases:
 - The poly-knit wiper has dried.
 - Things such as ink clotting adhered to the poly-knit wiper.
 - The poly-knit wiper is dirty with ink, etc.
 - The poly-knit wiper has been used for a week. (Replace it once a week.)
- If the cap sponge is too dirty or dry, replace it with a new one included in the box.
- Be sure to re-attach the print head cap after the head cleaning.



No.	Name
1	Print head cap
2	Poly-knit wiper
3	Cap sponge

Step 4 : Soak the cap sponges and the poly-knit wipers with jet-wash fluid using the wash bottle.



No.	Name
1	Print head cap
2	Cap sponge
3	Poly-knit wiper
4	Wash bottle

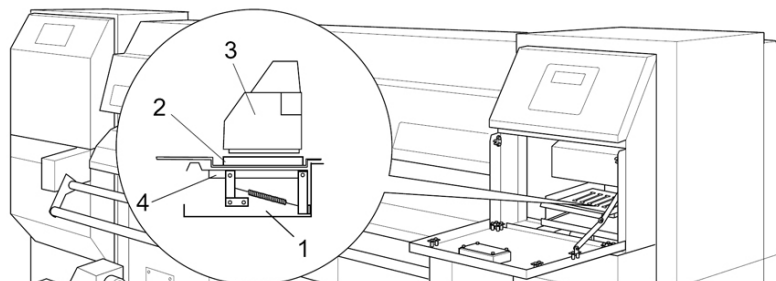
⚠ Notes ⚠

- Clean the following parts periodically.
 - The resin part of the print head cap.
 - The sides of the head (i.e. the parts to which ink clotting, etc., can easily adhere)
 - The cap sponges.

Step 5 : Set the print head cap on the waste fluid box.

⚠ Notes ⚠

- When setting the print head cap on the waste fluid box, prevent it from touching the nozzle surface of the head.



No.	Name
1	Waste fluid box
2	Print head cap
3	Print head
4	Purge plate

Step 6 : Position the caps on the print head cap and the print heads in front of each other.

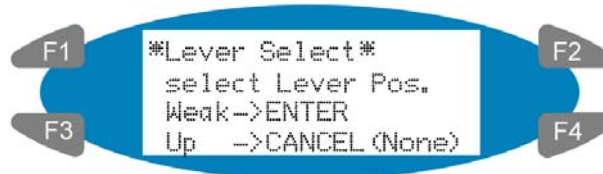
Step 7 : Lift the print head cap and set the purge plate to fix it.

Step 8 : Close the maintenance cover, ensure that the cover has been firmly fixed.

3. Finish the power down sequence:

Step 1 : Press the [ENTER] key on the operation panel.

- The following message is displayed on the operation panel:



- See next step to select the correct choice.

Step 2 : When media has been set, perform following operation:

- When not raising the pressure lever, press the [ENTER] key on the operation panel.
- When raising the pressure lever, press the [CANCEL] key on the operation panel or wait 10 seconds.

⚠ Notes ⚠

- Ensure to raise the pressure lever when the product is not in use for a long time. Not doing so may damage the pressure roller.
- When the pressure lever is up, or no media is set, the system shift to the next step without displaying the lever select menu.

The product will now finish the power OFF operation:

- The following message is displayed on the operation panel:



- If the [ENTER] key has been pressed in the previous step, the product will send the media for 0.8m (2.6ft.).
- The pressure roller rises.
- The POWER lamp of the operation panel will fades out.
- The product will automatically switch OFF.

⚠ Notes ⚠

- If there are problems during the power OFF operation, the unit will display a message on the operation panel, and the operation may stop. If the operation stops, refer to "Troubleshooting", and take the appropriate measures.

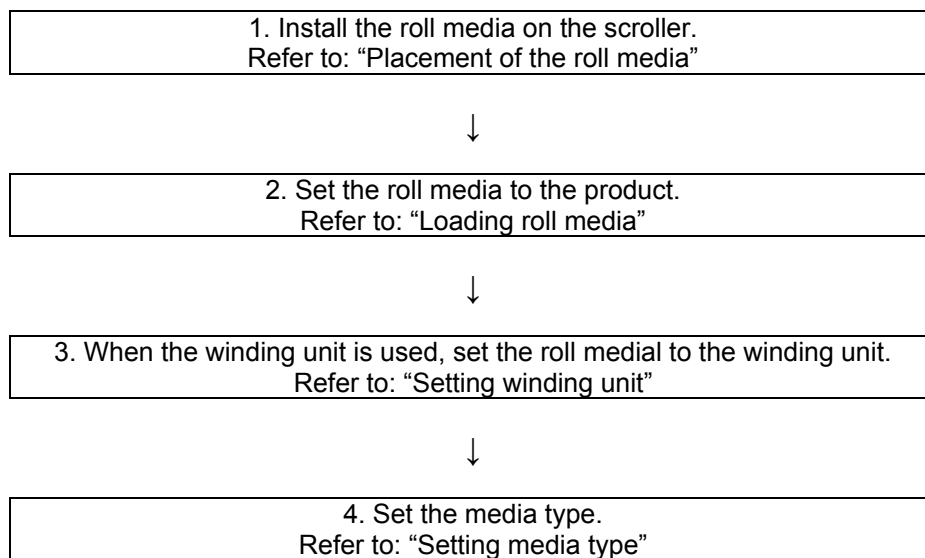
3.2 HANDLING AND INSTALLING MEDIA

Be sure to read and understand the safety warnings before handling the printer.

The following describes the procedures for installing and setting roll media, setting types of media, and using the winding unit.

The procedure required for media installation is shown in the following flow diagram.

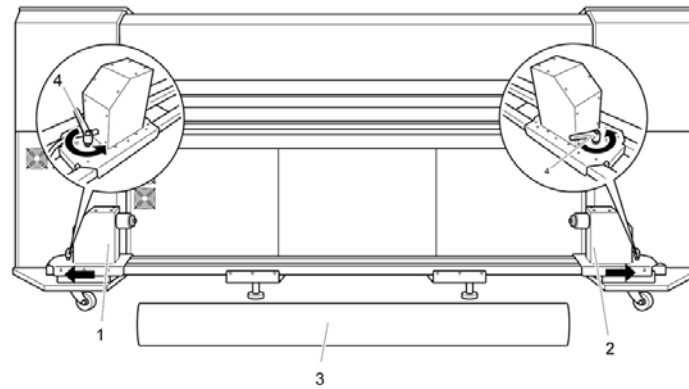
Refer to the following items according to the model to be used before performing the operations.



3.2.1 Installing roll media

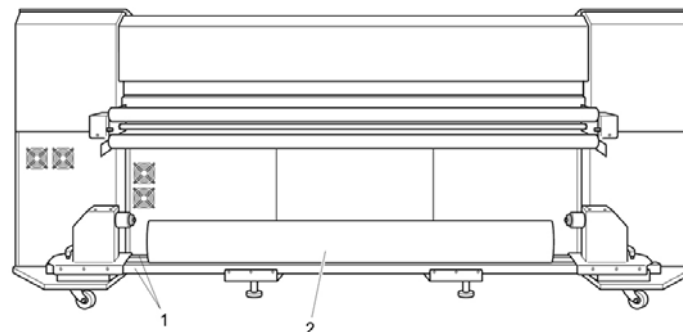
Actions to do at the **REAR** of the machine:

Step 1 : Release the fixing levers on the right and left sides and set the distance between the feed units wider than the roll media width.



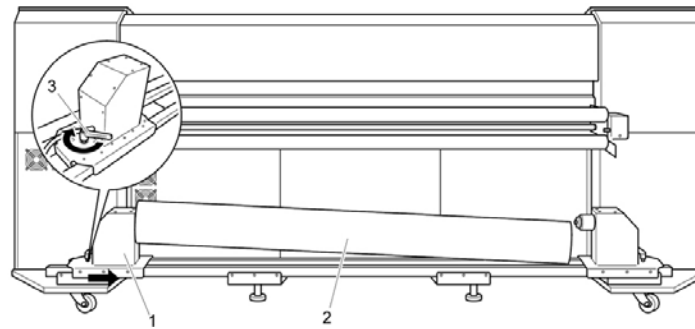
No.	Name
1	Feed unit (Left)
2	Feed unit (Right)
3	Roll media
4	Fixing lever

Step 2 : Place the roll media on the feed unit rails.



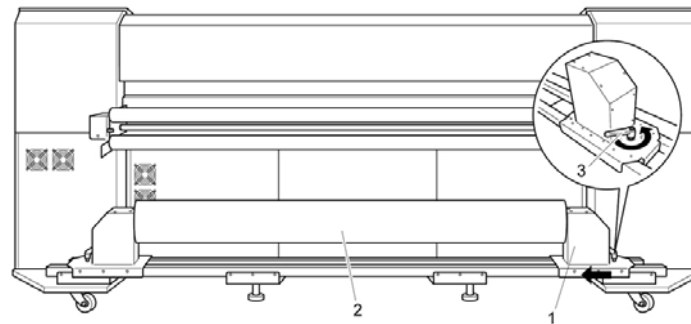
No.	Name
1	Feed unit rail
2	Roll media

Step 3 : Raise the left side of roll media - seeing from the rear side - and place it over the feed unit media support. Fix the fixing lever.



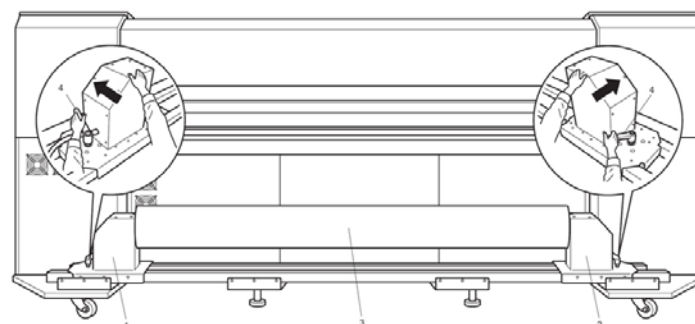
No.	Name
1	Feed unit (Left)
2	Roll media
3	Fixing lever

Step 4 : Set the other side of the roll media in the same way as step 3.



No.	Name
1	Feed unit (Right)
2	Roll media
3	Fixing lever

Step 5 : Release the right and left fixing levers of the feed units, move the roll media to the centre of the unit and fix it with the fixing levers.



No.	Name
1	Feed unit (Left)
2	Feed unit (Right)
3	Roll media
4	Fixing lever

3.2.2 Using the media core braces.

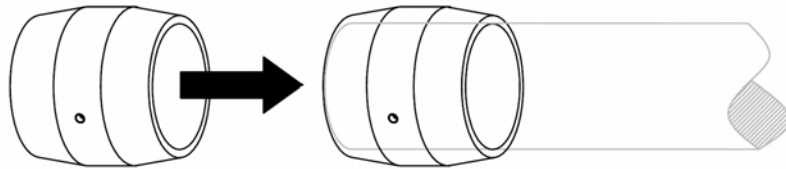
Media core braces are developed to prevent the media cores to bend while printing. This could cause bad print quality or paper slant.

From the moment the core is larger than 2050 mm, we recommend installing the brace. *Do NOT install the brace when the core is smaller than 2050 mm.*

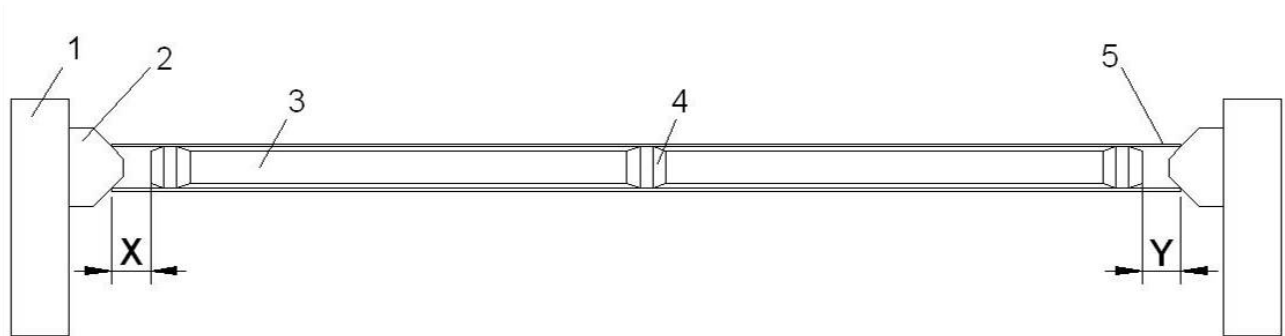
In the packaging box of the machine you will find two cores and two media core braces. There are already 3 spacers installed per brace with an outer diameter of 74 mm. In box 3/4 there are 6 spacers of 76 mm.

Please follow the instructions below to install and use the braces correctly.

Step 1 : First check which spacer fits the best in the used core. If this one is not installed yet, remove the installed one with a Hexagon Wrench 2 mm (in box 2/4) and install the correct one as shown below. There is already a hole in the core in which the locking screw fits.



Step 2 : Push the brace in the core. (Picture 1).
Be sure that the distance X is the same as Y (picture 2) and at least 75 mm.

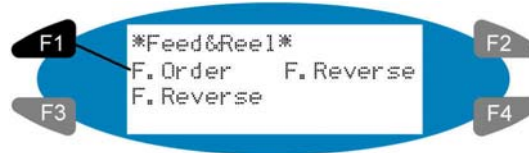


No	Description
1	Roll Unit
2	Positioning Cone
3	Media Core Brace
4	Spacer
5	Core of minimum 2050 mm

3.2.3 Loading roll media

Be sure to read and understand the safety warnings before handling the printer.

- Step 1 :** Switch ON the printer.
- Refer to “Switch ON/OFF the printer”
 - The following message is displayed on the operation panel:



⚠ Notes ⚠

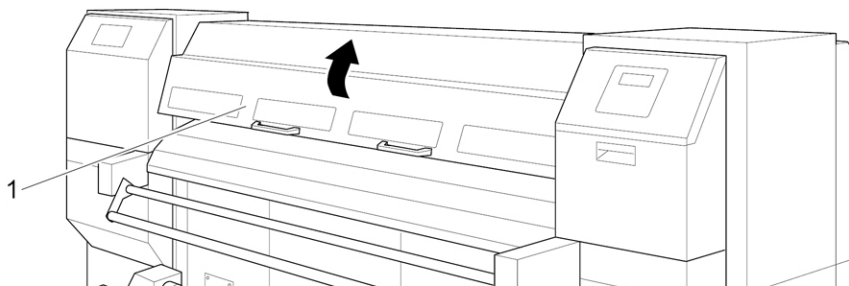
- In the following conditions, follow "Menu setup on the operation panel" and set individual settings.
 - When using the winding unit: Set the winding unit setting to "ON" Refer to: “Winding unit menu”.
 - When not performing media detection during media initialization: Set media detection to "No". Refer to: “Media detection menu”.
 - When using roll media such as the printable side is outside: Set the feed unit item to "Outside". Refer to: “Feed unit menu”.
 - When using the roll media such as the printable side is inside: Set the feed unit item to "Inside". Refer to: “Feed unit menu”.

- Step 2 :** Verify the MEDIA SET lamp of the control panel is OFF.

- Step 3 :** Press the [F2] key to raise the pressure roller.
- The MEDIA SET lamp will light orange.
 - The following message is displayed on the operation panel:



- Step 4 :** Open the front cover.

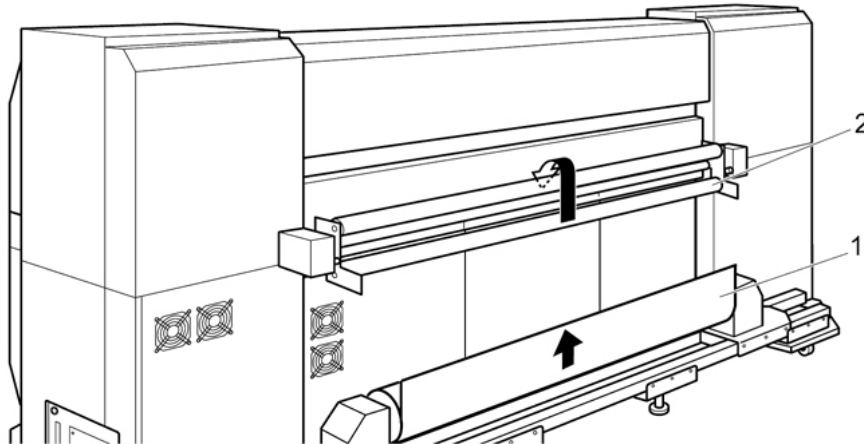


No.	Name
1	Front cover

Step 5 : Install a media core brace in case you use media is wider than 2 meter. This to prevent the media to bend.



Step 6 : Lift up the tension roller at the backside of the product with your hand so the roll media is unwinded automatically by the roll unit.



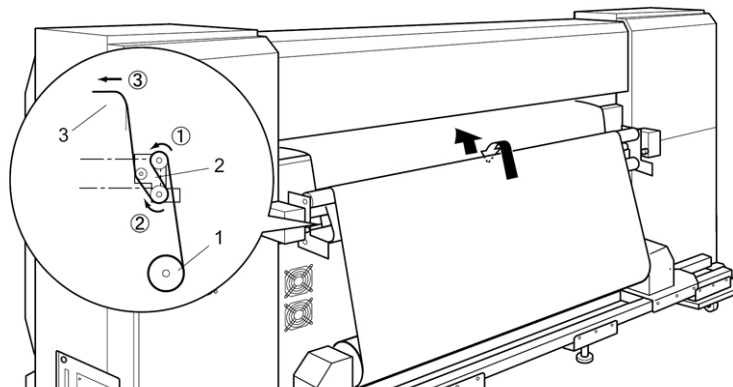
No.	Name
1	Roll media
2	Tension roller

Step 7 : Insert the top of the media in the media feed slot after passing the roll media through the tension roller system. See images below to see the path.

⚠ Notes ⚠

- If there is a part not tightly wound at the end of the roll media, wind it tightly again, then load it.

a. When using a roll media with the printable side on the outside of the roll.

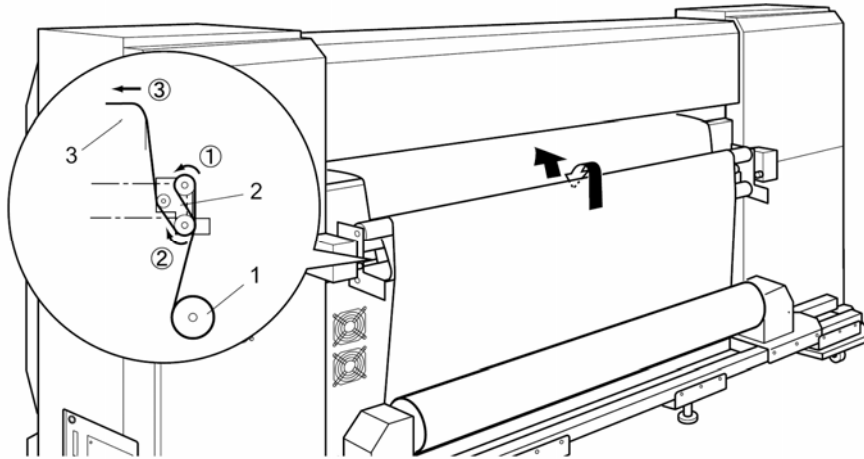


No.	Name
1	Roll media
2	Tension roller system
3	Media feed slot

b. When using a roll media with the printable side on the inside of the roll.

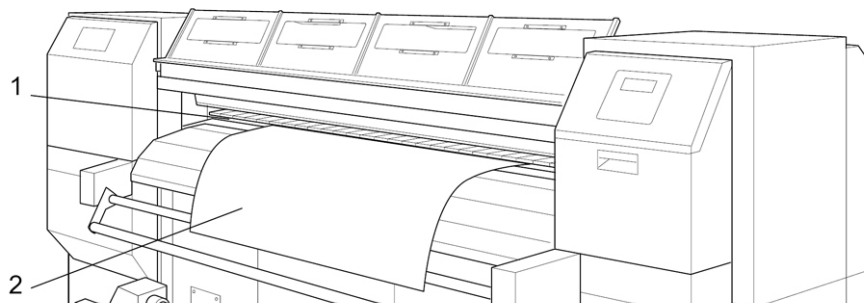
⚠ Notes ⚠

- Problems that occur due to usage of media with printable side inside are not guaranteed.



No.	Name
1	Roll media
2	Tension roller system
3	Media feed slot

Step 8 : Pull the roll media out for about 1 m from the front media feed slot, which is located inside the front cover.



No.	Name
1	Front media feed slot
2	Roll media

Step 9 : Press the [F3] key on the control panel.

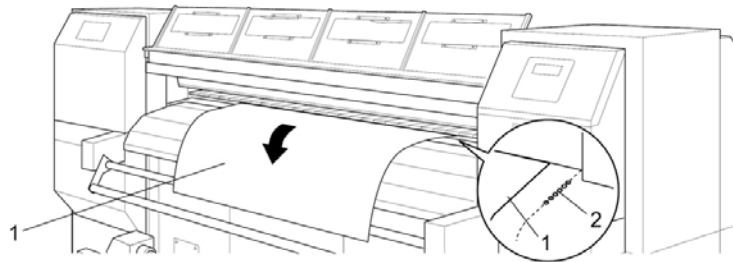
- The following message is displayed on the operation panel:



Step 10 : Rewind the roll media a little by pressing the [F1] key on the operation panel WHILE HOLDING the top-edge of the media BY HAND, in order to eliminate any loose or slant. See image below.

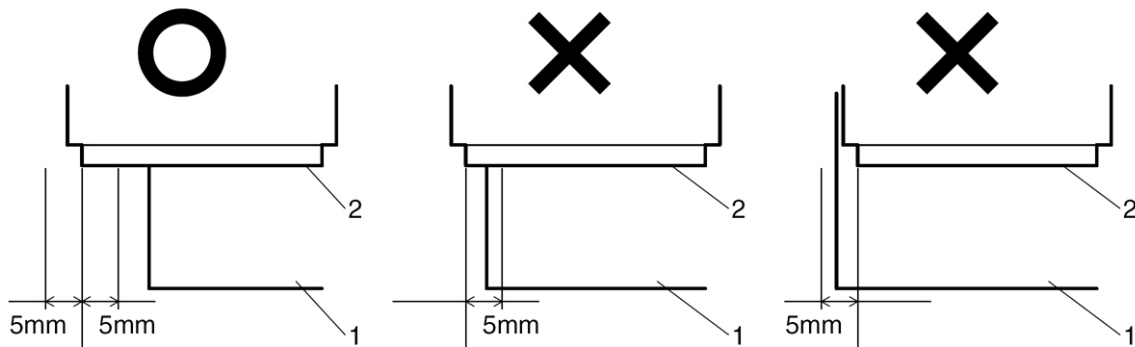
Notes

- If you do not hold the top edge of the media by hand while rewinding, the roll media will fall out from the media feed slot to the rear side of the product.
- Make sure not to set the right edge of the media over the media loading position. If doing so, it may affect the printing quality.



No.	Name
1	Roll media
2	Media loading position

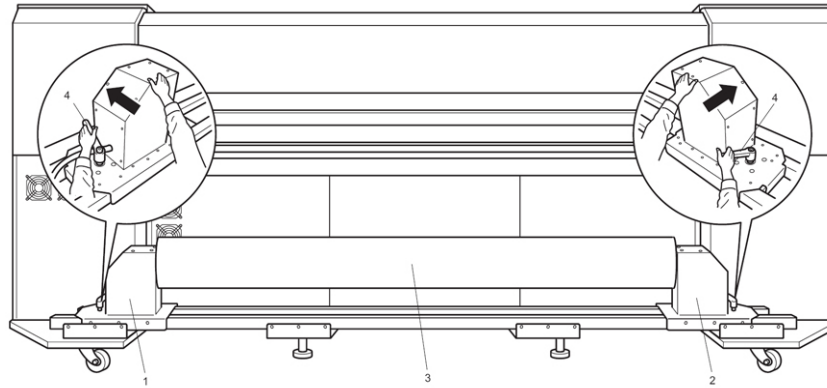
Step 11 : Check if both sides of the roll media are at least 5 mm away from the pressure roller's ends. See image below.



No.	Name
1	Roll media
2	Pressure roller

Step 12 : If one edge of the roll media has been positioned 5 mm or less from the pressure roller's end, adjust the position of the roll media:

- Release the right and left fixing levers of the feed units, and move the roll media to the left or right.
- After moving the roll media, fix it again with the fixing levers.



No.	Name
1	Feed unit (Left)
2	Feed unit (Right)
3	Roll media
4	Fixing lever

Step 13 : Press the [CANCEL] key on the operation panel.

- The operation panel returns to the normal condition.

⚠ Notes ⚠

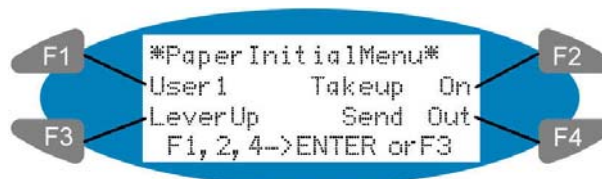
- When using the winding unit, follow "Setting winding unit" and set the roll media to the winding unit.

Press the [F2] key on the control panel to lower the pressure roller.

- The MEDIA SET lamp switches OFF.

Step 14 : Close the front cover.

Step 15 : Wait until the media initial menu is displayed on the control panel.



⚠ Notes ⚠

- When changing the media type, follow "Setting media type" to set the media type.

⚠ Notes ⚠

- If you load a new tube of roll media, the media end may not be straight. If so, cut the end of the roll media. Refer to: "Roll media cutting procedure" to cut the roll media.

3.2.4 Setting winding unit

Be sure to read and understand the safety warnings before handling the printer.

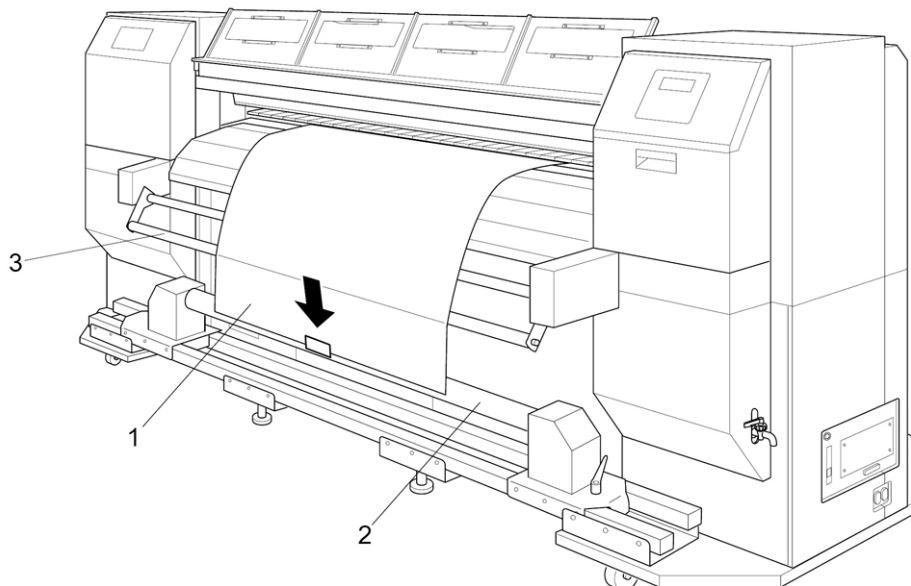
When using the winding unit, set it up according to the following procedure:

- Step 1 :** Attach the media tube between the feed units of the winding unit, the same way you've attached the roll media between the feed units of the unwinding unit at the rear.
Refer to: "Placement of the roll media"

⚠ Notes ⚠

- When using the winding unit, always use the media tube attached to the product.

- Step 2 :** Pull out the roll media (1) from the feed slot, and fix it with tape to the media tube so that the leading edge is parallel with the media tube.

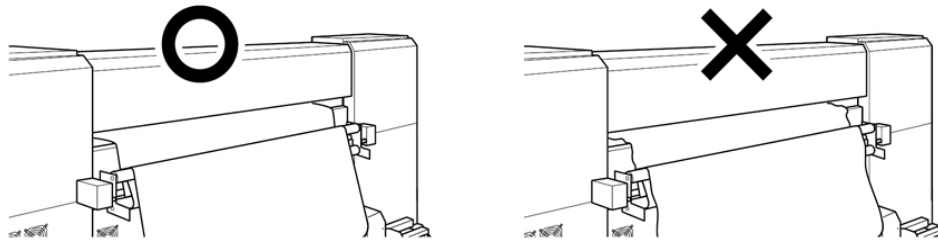


No.	Name
1	Roll media
2	Media tube
3	Cushioning roller

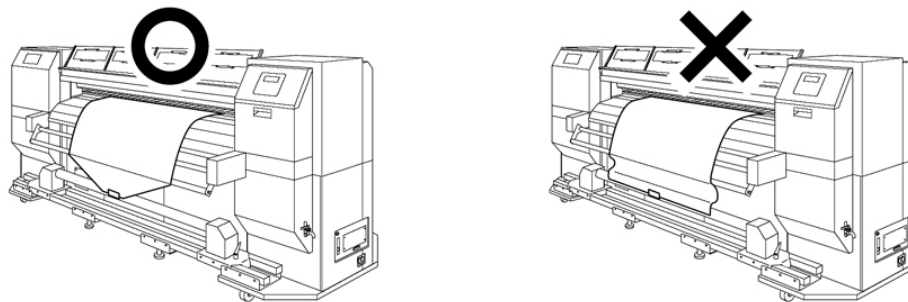
⚠ Notes ⚠

- Install the media on the media tube so that the printing side faces outside. The media cannot be wound if the printable side faces inside.

Step 3 : Check the front and back of the product and make sure the media is free of wrinkles or slack.



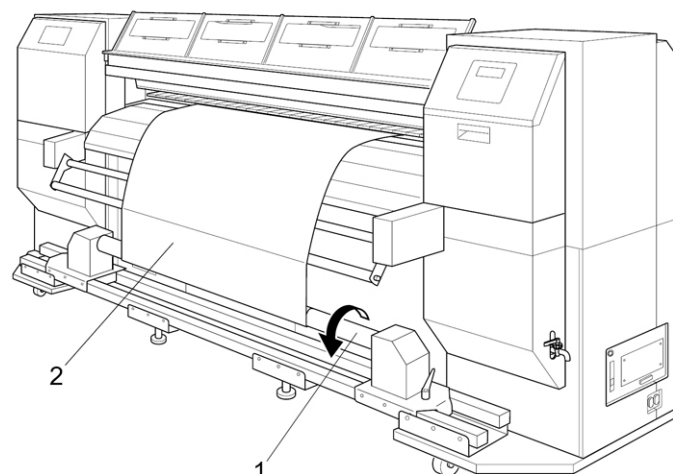
Step 4 : Cutting both sides of the media allows you to wind the roll media well as shown on the next figure.



Step 5 : Press the [F3] key on the operation panel.



Step 6 : Press the [F1] key, and wind the roll media on the media tube of the winding unit by approximately one and half turn.



No.	Name
1	Media tube of winding unit
2	Roll media

3.2.5 Setting media type

Be sure to read and understand the safety warnings before handling the printer.

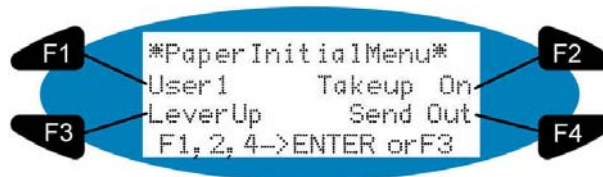
Step 1 : Switch ON the printer.

⚠ Notes ⚠

- Before setting the media type, verify the media is correctly installed and loaded. Refer to: "Loading roll media" to load media.

Step 2 : Press the keys on the control panel to change the settings.

- When changing the type of media: [F1] key
- When changing the setting of the winding unit: [F2] key
- When going over from media loading: [F3] key
- When changing the setting of feed unit: [F4] key



Setup items	Key	Parameters	Descriptions
Media type	F1	User 1	Makes setting for media type used for test printing. Sixteen settings of "User 1-16" can be set. Refer to: "Menu setup on the operation panel"
		User 2	
		User 3	
		User 4	
		User 5	
		User 6	
		User 7	
		User 8	
		User 9	
		User 10	
		User 11	
		User 12	
		User 13	
		User 14	
		User 15	
		User 16	
Take-up OUT/IN/OFF	F2	Take-up OUT	Sets the operation of the winding unit. • Take up OUT: Set when taking up the printable side outward • Take up IN: Set when taking up the printable side inward • Take up Off: Set when not using the winding unit
		Take-up IN	
		Take-up Off	
Lever Up/Down	F3	Lever Up	Switches between up and down motion of the pressure lever. Use this when starting over from the media setup.
		Lever Down	
Send Out/In	F4	Send Out	Sets the operation of the feed unit. • Send Out: Set when using the roll media such as the printable side is outside • Send In: Set when using the roll media such as the printable side is inside
		Send In	

⚠ Notes ⚠

- Problems that occur due to usage of media with the printable side inside are not guaranteed.

Step 3 : Press the [ENTER] key on the control panel.

- The media type has been set.
- The printer starts the media initialization.

⚠ Notes ⚠

- In the media initial menu, the unit will move on to the media initial operation WITHOUT setting the media type when :
 - o the [CANCEL] key of the control panel is pressed or
 - o Leaving the printer for 10 seconds without doing anything.



Step 4 : Wait until the media initial operation has been finished and the printer is in normal status.

- The media width is displayed on the operation panel for 5 seconds as shown below:



- The setting media loading procedure has been completed.



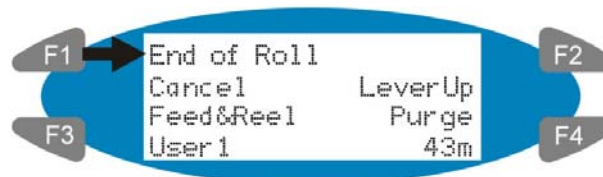
3.2.6 Replacing roll media

Be sure to read and understand the safety warnings before handling the printer.

Replacement period

Replace roll media under the following conditions.

- When the roll media loaded in the printer comes to an end
 - The following message is displayed on the operation panel.
 - If the media comes to an end while printing, the printer stops printing.



b. When you want to change the type of media

Notes

- Do not repeat inserting or pulling out the roll media of the same type. Doing so may damage the paper roll and cause idle operation.

Types

Notes

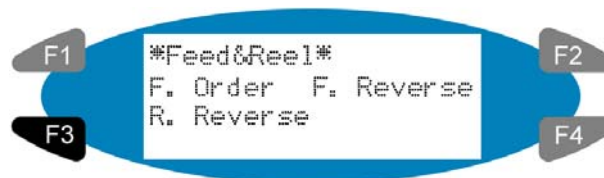
- For types and details of roll media refer to: "Options/Supply list"

Replacement procedure

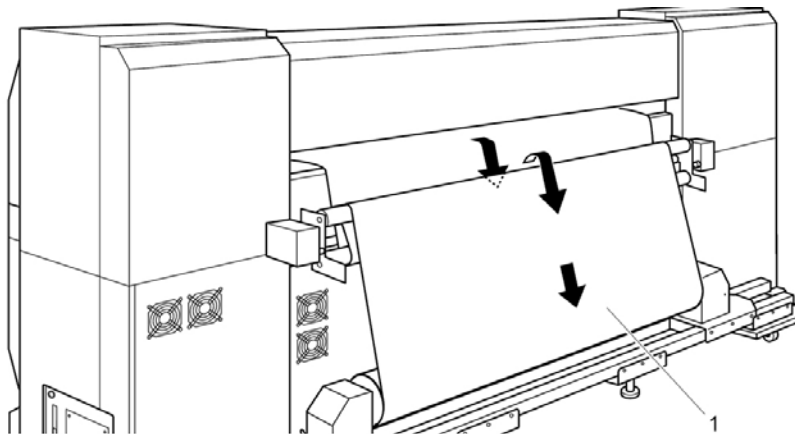
Step 1: If the printer is switched ON, make

- There is no printing operation being performed.
- The control panel is in a normal status.
- Make sure that the MEDIA SET lamp is lit (orange) on the operation panel.

Step 2: Press the [F3] key on the operation panel.
The following message appears.

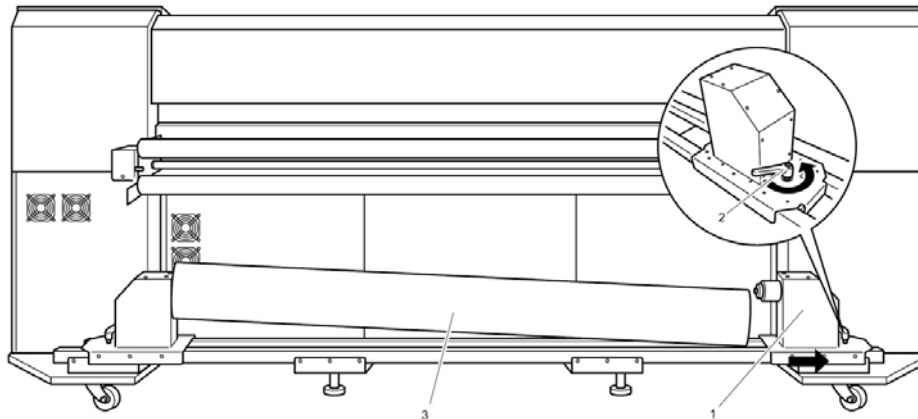


Step 3: Press the [F3] key and wind up the roll media.



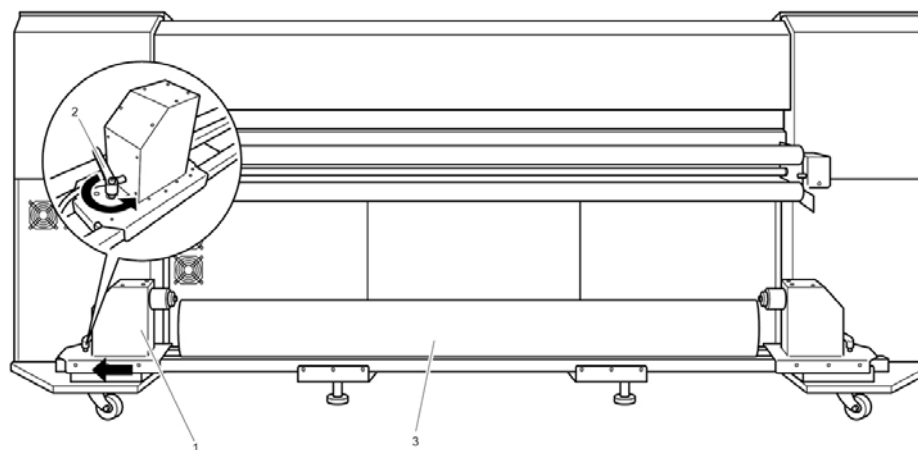
No.	Name
1	Roll media

Step 4: Release the feed unit fixing lever at the rear right handed side. Remove the right feed unit from the roll media, and set the roll media on the feed unit rails.



No.	Name
1	Feed unit (Right)
2	Fixing lever
3	Roll media

Step 5: Remove the roll media from the feed unit at the rear left, just as in the step 4.



No.	Name
1	Feed unit (Left)
2	Fixing lever
3	Roll media

Notes

- Refer to: "Media handling" for more details.

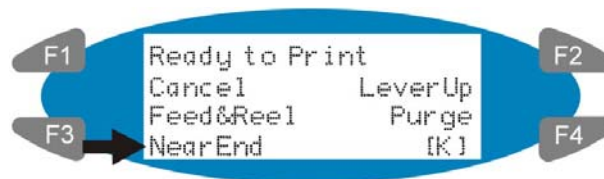
3.3 REFILLING THE INK AND JET WASH FLUID

Read the following information on when and how to refill the ink and the jet wash fluid.

(1) Refilling period

Refill the ink in the following cases

- a. When the amount left in the main tank becomes low
 - Printing will continue to be performed.
 - Before the ink runs out, prepare the ink for refilling.
 - The following message is displayed on the operation panel.



- b. When the ink inside the main tank is run out
 - Printing operation stops.
 - Refill with new ink immediately.
 - The following message is displayed on the operation panel.

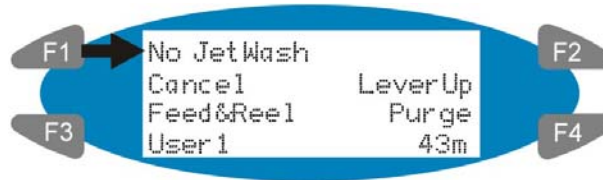


⚠ Notes ⚠

- When the ink runs out or is close to being empty, the colour of the ink that needs refilling will be indicated as follows:
 - K: Black
 - C: Cyan
 - c: Light Cyan
 - M: Magenta
 - m: Light Magenta
 - Y: Yellow
- After the message "Near End" has been displayed on the operation panel, about 6m²(66.7ft²) (When "Quality" in the setup menu is set to 360×720dpi) of printing is possible, until the ink runs out.
- Even when the "No Ink" is displayed at the control panel, there may be a small amount of ink left in the main tank.

Refill the jet wash fluid when the following occurs.

- a. When the jet wash fluid inside the main tank is run out
- Printing will continue to be performed.
 - Refill the new jet wash fluid immediately.
 - The following message is displayed on the operation panel.



(2) Types

⚠ Notes ⚠

- Use MUTOH recommended ink only.
 - The printer is designed for use with genuine ink cartridges. If you do not use genuine products,
 - Print outs may become faint and the printer will not be able to detect the end of ink.
 - Problems caused by using ink other than the recommended will void the warranty.
- Refer to the following for the types and details of ink and the ink jet wash fluid.
See "Options/Supply list"

(3) Refilling procedure

Follow the steps in "Filling the ink - jet wash fluid" to refill the ink.

⚠ Notes ⚠

- If ink is refilled during printing, printing is resumed.

3.4 DISPOSAL OF WASTE FLUIDS

Be sure to read and understand the safety warnings before handling the printer.

(1) Disposal period

Dispose waste fluids during the following conditions:

- After finishing printing operation
- When the message "Waste Ink Tank Full" is displayed on the operation panel.

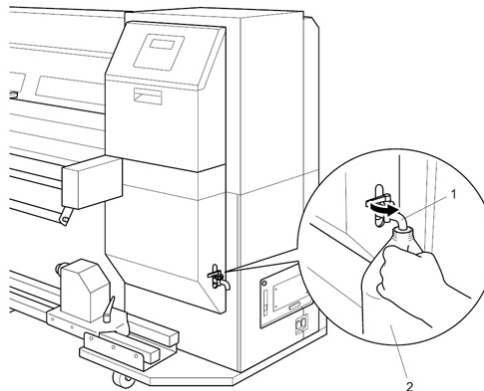


(2) Disposal method

Dispose the waste fluid according to the following procedure.

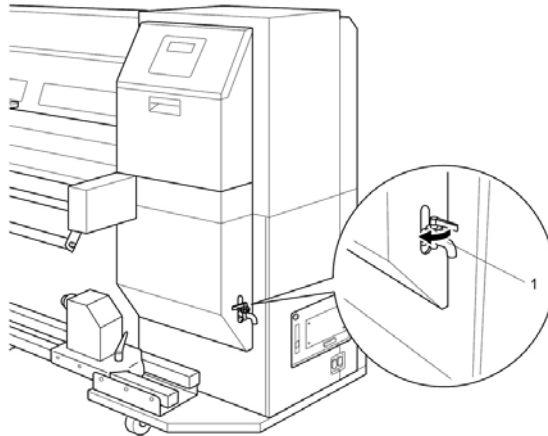
Step 1: Verify that the printer is switched OFF.

Step 2: Put an empty container such as a used supply ink bottle under the waste fluid valve.



No.	Name
1	Waste fluid valve
2	Empty container

Step 3: Open the waste fluid valve, and transfer the waste fluid to the container.



Step 4: Close the waste fluid valve securely.

Step 5: Dispose the waste fluid as an industrial waste product.

3.5 TRANSFER AND TRANSPORTATION

3.5.1 Transferring the printer

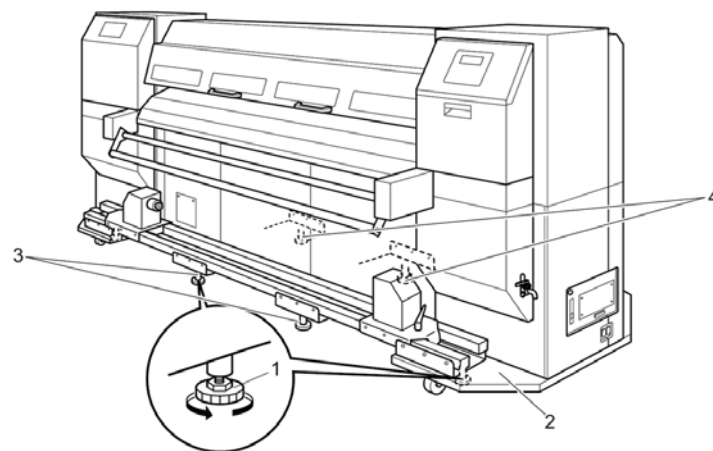
(1) Before the transfer

Be sure to read and understand the safety warnings before handling the printer.

- Step 1 :** Make sure that the printer is switched OFF.
- Step 2 :** Dispose of the waste fluid.
- Step 3 :** Disconnect the power cable and all other cables.
- Step 4 :** Turn the following adjusters to the directions shown in the diagram to loosen.
- Stand: 4
 - Winding unit: 2
 - Feed unit: 2
- Step 5 :** Transfer the printer.

⚠ Notes ⚠

- The casters attached to the stand have been designed for transferring the printer short distances on a surface in-house.



No.	Name
1	Adjuster
2	Stand
3	Winding unit
4	Feed unit

(2) After the transfer

Step 1 : After moving to the installation location, fix the product to the location.

Notes

- For more information on where to place the printer, refer to "Installation Manual".

Step 2 : Connect the power cable and other cables.

Notes

- For connecting cables, refer to:
"Connecting the power cable"
"Connecting the printer to your PC"

Step 3 : Perform nozzle checking to check if the printer head has clogged.

Notes

- To perform the nozzle check, refer to "Nozzle Check".

Step 4 : Perform a fine adjustment of image quality.

Notes

- To perform an adjustment of image quality, refer to "Alignment".

3.5.2 Transporting the printer

When you transport the printer, the printer should be repacked using the original box and packing materials, to protect it from vibration or impact.

Notes

- When you transport the printer, contact your local MUTOH dealer.

3.6 LONG-TERM STORAGE CLEANING

Be sure to read and understand the safety warnings before handling the printer.

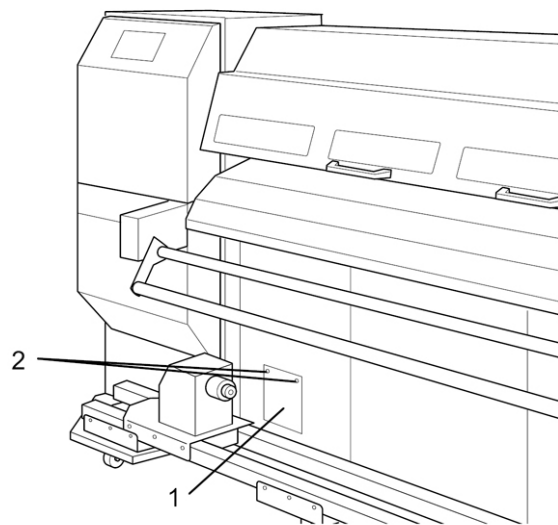
Cleaning Period

When not using the unit for over 1 week, perform cleaning for long term storage.

Operational procedure

Step 1 : Loosen the fixing screws for the 3-way valve cover.

Step 2 : Remove the 3-way valve cover.



No.	Name
1	3-way valve cover
2	Screws to fix 3-way valve cover (2 pcs)

Step 3 : Switch the unit ON.

Step 4 : Follow the instructions in "Filling the ink - jet wash fluid" to refill the jet wash fluid.

Step 5 : Follow the instructions in "Disposal of waste fluids" to empty the waste fluid tank.

Step 6 : Follow the instructions in "Menu setup on the operation panel", and bring up the Long Save menu on the control panel.

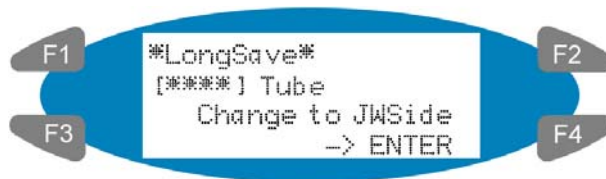


Step 7 : Press the [F1] key to [F4] keys to select the print head to perform the long-term storage cleaning process.

⚠ Notes ⚠

- In the Long Save menu, selecting "ALL" is recommended. By selecting "ALL", the long-term storage cleaning treatment is performed for all print heads one by one.
- When "NO" is selected in the Long Save menu, the menu returns to the lower hierarchy without performing the long term storage cleaning treatment.
- Refer to "Long-term storage cleaning menu" for more details.

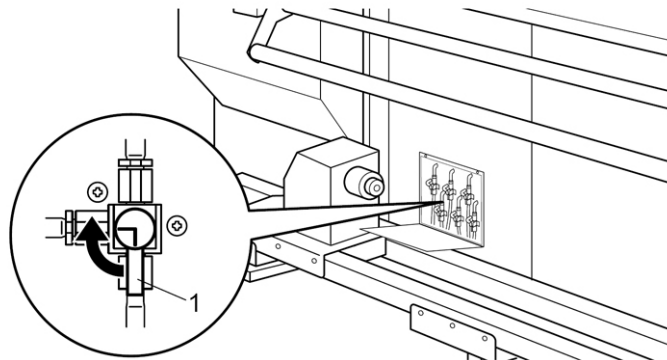
- The printer starts the long-term storage cleaning treatment.
- It takes about 25 minutes per colour of ink to operate the long-term storage cleaning treatment.
- The following message is displayed on the operation panel.



⚠ Notes ⚠

- In the [****] part of the message, the colour of the 3-way valve to be operated will be displayed.

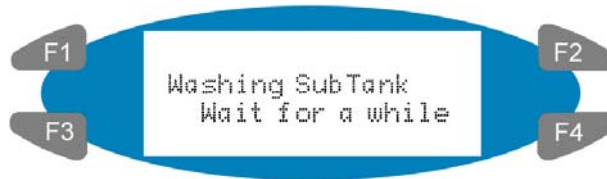
Step 8 : Switch the 3-way valve to the jet wash fluid side.



No.	Name
1	3-way valve

Step 9 : Press the [ENTER] key on the operation panel.

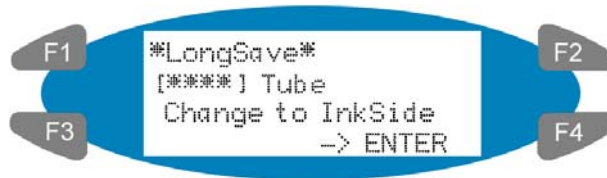
- The product starts washing the sub tank.
- The following message is displayed on the operation panel.



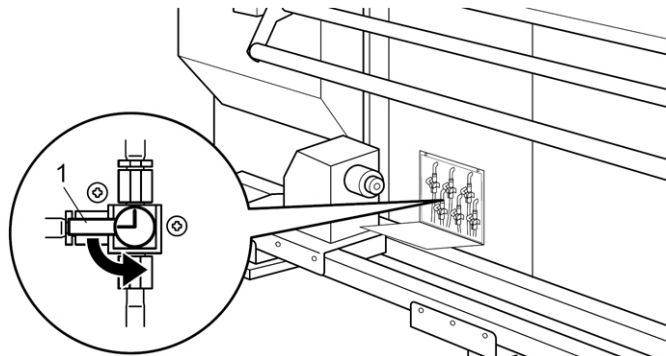
- After completing the injection of the jet wash fluid, the following message is displayed on the operation panel.

⚠ Notes ⚠

- In the [****] part of the message, the colour of the 3-way valve to be operated will be displayed.



Step 10 : Switch the 3-way valve to the ink side.



No.	Name
1	3-way valve

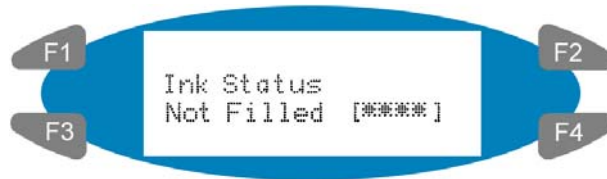
Step 11 : Press the [ENTER] key on the operation panel.

Step 12 : When "ALL" has been selected in Step 7 to 11 is repeated until the long-term storage cleaning treatment has been completed for all print heads.

- When the long-term storage cleaning treatment has been completed for all print heads, the operation panel returns to the normal status.
- The following message is displayed on the operation panel.

⚠ Notes ⚠

- In the [****] part of the message, the colour of finished long-term storage cleaning treatment will be displayed.



Step 13 : Follow the instructions in "Switching the power OFF" to power OFF.

Step 14 : Attach the 3-way cock cover removed in the step 1 and step 2.

- The long-term storage cleaning treatment is completed.

⚠ Notes ⚠

- If the power is switched ON after the long-term storage cleaning treatment has been completed, the printer starts the initial ink filling.

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4 PERIODICAL MAINTENANCE

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4.1 CLEANING THE PRINTER

Be sure to read and understand the safety warnings before handling the printer.

You need to clean the printer periodically to keep it in best working condition.

4.1.1 Cleaning the outer case

Clean the outer case once a month with a soft, clean cloth.

4.1.2 Cleaning inside the printer

Clean the inside of the printer once a week.

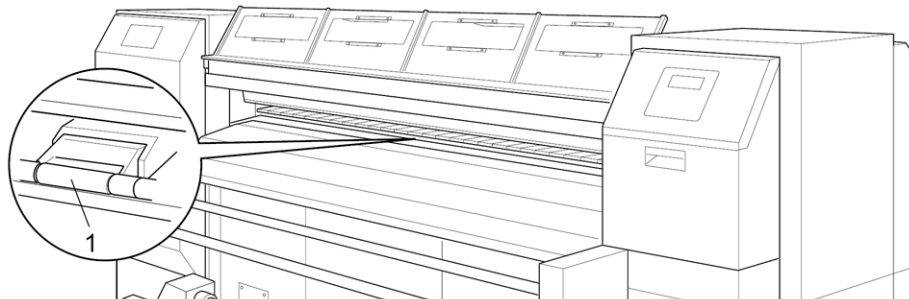
Cleaning Procedure

Step 1 : Open the front cover.

Step 2 : Use a soft brush to carefully clean away any dust or dirt on the pressure roller.

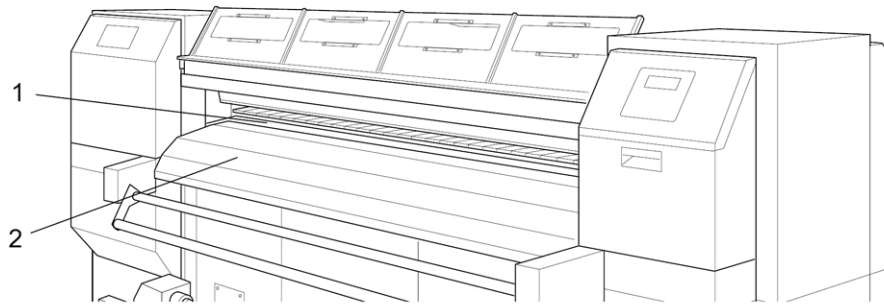
⚠ Notes ⚠

- Do not blow off media dust inside the printer using an air dusting machine. Doing so may cause noise to occur from inside the printer.



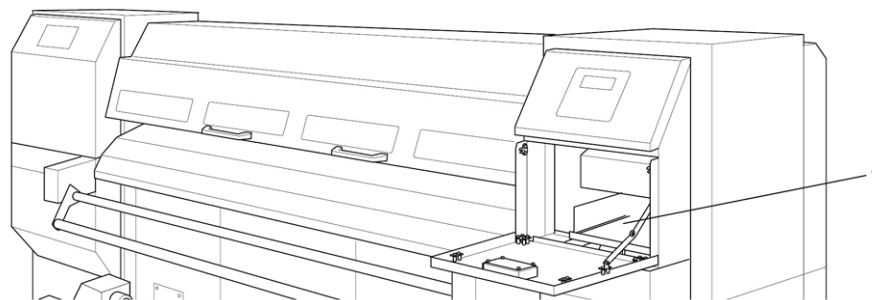
No.	Name
1	Pressure roller

Step 3 : The platen and the media guide have to be cleaned with a soft damp cloth for any paper dust or ink that has accumulated.



No.	Name
1	Platen
2	Media guide

Step 4 : Soak the poly-knit wiper provided with the unit, and wipe off ink and other dirt from the waste fluid tray.



No.	Name
1	Waste fluid tray

4.1.3 Cleaning of the print head surface

Be sure to read and understand the safety warnings before handling the printer.

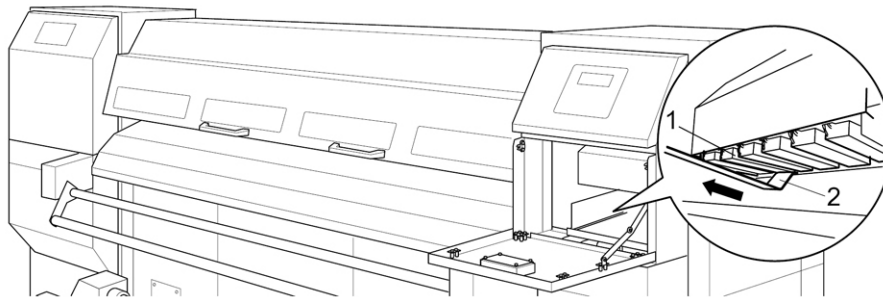
(1) Cleaning period

Clean every day or after the completion of the operation.

(2) Cleaning Procedure

Step 1 : Open the maintenance cover.

Step 2 : Using the attached print head wiper, lightly wipe off the ink accumulated on the print head. Wipe from the back of the printer toward yourself.



No.	Name
1	Print head
2	Print head wiper

Step 3 : Close the maintenance cover.
Ensure that the cover is firmly fixed.

4.1.4 Replacing sponge for spitting box

Be sure to read and understand the safety warnings before handling the printer.

Replace the sponge of the spitting box under the following conditions.

- When a sponge for spitting box hardened.
- When the media becomes dirty with the ink.

Types

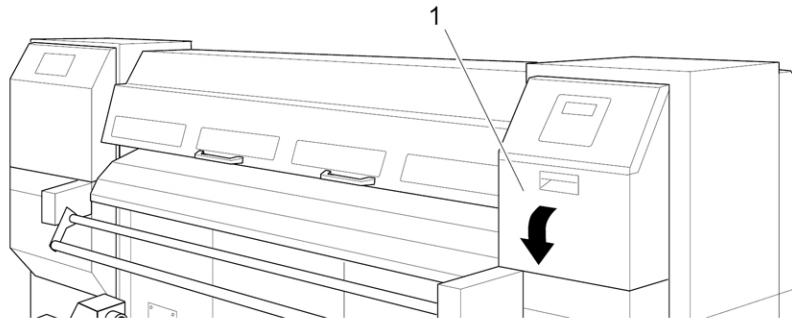
Notes

For types and details of the sponge for spitting box, refer to “Options/Supply list”

Replacement procedure

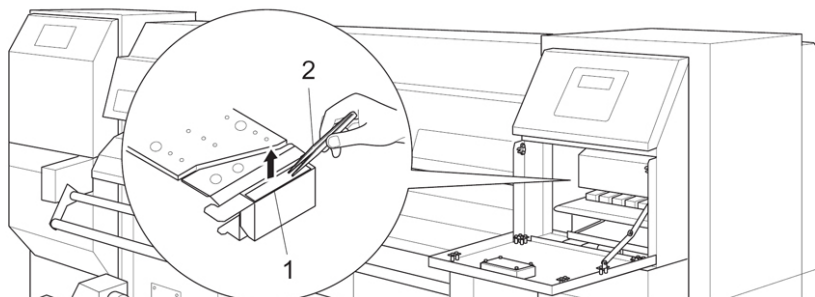
Step 1 : Power OFF the unit.

Step 2 : Open the maintenance cover.



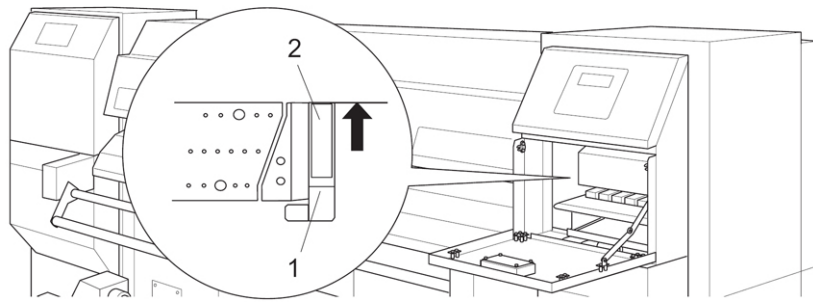
No.	Name
1	Maintenance cover

Step 3 : Remove the four sponges of the spitting box with tweezers etc.



No.	Name
1	Sponge for spitting box
2	Tweezers

Step 4 : Install four new sponges for the spitting box.



No.	Name
1	Flushing box
2	Sponge for flushing box

Step 5 : Close the maintenance cover.

Step 6 : The replacement of the sponge for flushing box has been completed.

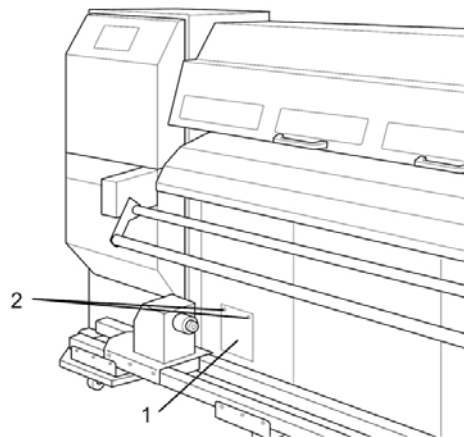
4.1.5 Washing print head

Cleaning Period

If the condition of the print head does not recover when performing the head cleaning, perform the print head washing.

Operational procedure

Step 1 : Loosen the fixing screws for the 3-way valve cover.



No.	Name
1	3-way valve cover
2	Screws to fix 3-way valve cover (2 pcs)

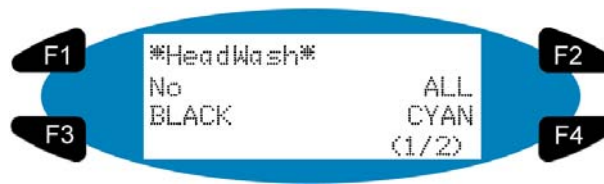
Step 2 : Remove the 3-way valve cover.

Step 3 : Switch the unit ON.

Step 4 : Follow the instructions in "Filling the ink - jet wash fluid" to refill the jet wash fluid.

Step 5 : Follow the instructions in "Disposal the waste fluids" to empty the waste fluid tank.

Step 6 : Follow the instructions in "Menu setup on the operation panel", and bring up the print head washing menu on the operation panel.

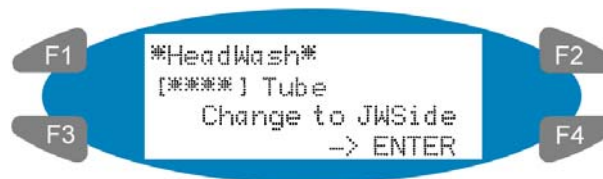


Step 7 : Press the [F1] key to [F4] key to select the print head to perform the print head washing process.

⚠ Notes ⚠

- In the Head wash menu, selecting "ALL" is recommended. By selecting "ALL", the print head washing treatment successively is performed for all print heads one by one.
- When "No" is selected in the Head wash menu, the menu returns to the previous hierarchy menu without performing the print head washing treatment.
- Refer to: "Head wash menu" for more details.

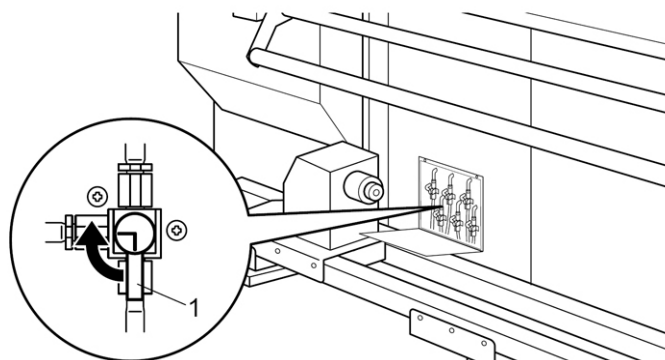
- The product starts the print head washing treatment.
- It takes about 5 to 10 minutes to operate the print head washing treatment.
- The following message is displayed on the operation panel.



⚠ Notes ⚠

- In the [****] part of the message, the colour of the 3-way valve to be operated will be displayed.

Step 8 : Switch the 3-way valve to the jet wash fluid side.



No.	Name
1	3-way valve

Step 9 : Press the [ENTER] key on the operation panel.

- The product starts washing the print head.
- The following message is displayed on the operation panel.

⚠ Notes ⚠

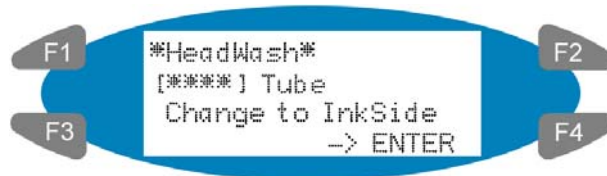
- In the Print head washing treatment, washing print head is automatically repeated for 7 to 14 times.
- When pressing the [CANCEL] key during washing the print head;
 - Washing print head is performed within 7 times: After washing the print head 7 times, the jet-wash fluid is injected from the sub tank.



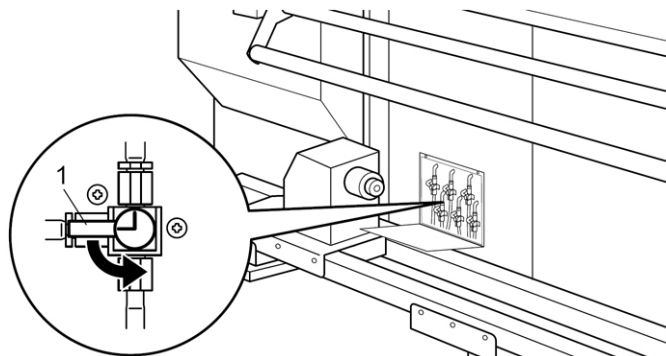
- After completed the injection of the jet wash fluid, the following message is displayed on the operation panel.

⚠ Notes ⚠

- In the [****] part of the message, the colour of the 3-way valve to be operated will be displayed.



Step 10 : Switch the 3-way valve to the ink side.

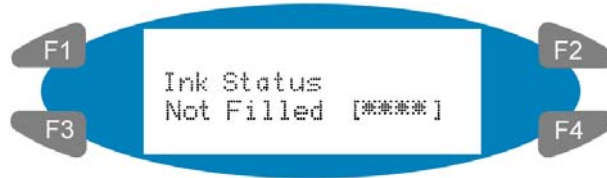


No.	Name
1	3-way valve

Step 11 : Press the [ENTER] key on the operation panel.

Step 12 : When "ALL" has been selected in the Step 5, Step 6 to 9 is repeated until the print head washing treatment is completed for all print heads.

- When the print head washing treatment has been completed for all print heads, the operation panel returns to the normal condition.
- The following message is displayed on the operation panel



⚠ Notes ⚠

- In the [****] part of the message, the colour of the print head to be washed will be displayed.

Step 13 : Follow the instructions in "Switching the power OFF" to power OFF.

Step 14 : Set the 3-way valve cover removed in steps 1 and 2.

The print head washing treatment has been completed.

⚠ Notes ⚠

- If the power ON after the print head washing treatment is completed, the product starts the initial ink filling.

4.2 DONE BY AN AUTHORIZED MUTOH TECHNICIAN

4.2.1 Replacing ink filter

Replacement period

Replace the ink filter once a year.

Replacement procedure

The ink filters are replaced in a periodic inspection.

5 PREPARATIONS BEFORE PRINTING

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5.1 USING MEDIA

5.1.1 Media type

The type and quality of the media effects the printing results. Understand the description below and use the appropriate media for your purpose.

⚠ Notes ⚠

- For more information about the recommended media, contact your local MUTOH dealer.
- Problems that occur due to use of non-recommended media are not guaranteed.

⚠ Notes ⚠

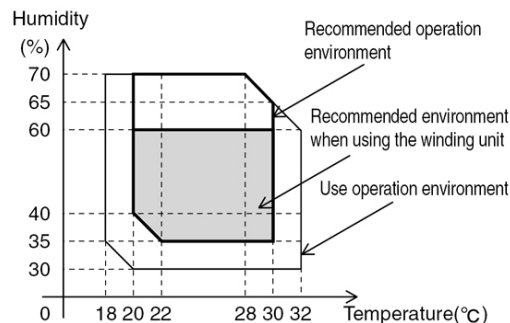
- When using the recommended media, the setting values for the printing quality are set for each media type.
- When printing on media other than those specified, information regarding proper settings for the media type and settings for the product can be found on the instructions for the media, or contact the retailer of the media.

5.1.2 Cautions on handling media

- Use the recommended media in an appropriate environment.

Be sure to read and understand the safety warnings before handling the printer.

Following are the temperature and humidity ranges appropriate for printing.



- Do not use any of the following media.
 - Media with crease, scar, tear, twist or media which tends to curl
 - Welded media
- The size of the recommended media can change at a fixed ratio according to the temperature changes of the working environment. Before using the media, place the media in the working environment for at least 30 minutes, to have it match the temperature of the working area.
- Printing before media is adjusted to the printing environment may cause media jams due to slippage or creases. This also adversely affects the quality of printing.
- Media has a printable side and a non-printable side. If you print on a non printable side, blurring or slight touching may occur.
- Do not touch the printable side of media. Moisture and/or oil from hands affect(s) the printing quality.
- Do not leave the printer for a long time with media loaded. The media may curl resulting in misalignment of media, media jams, or decreased printing quality. In practice, avoid this in winter, dry seasons, or during final printing.
- Do not lose the box or rapping bag for storing media.

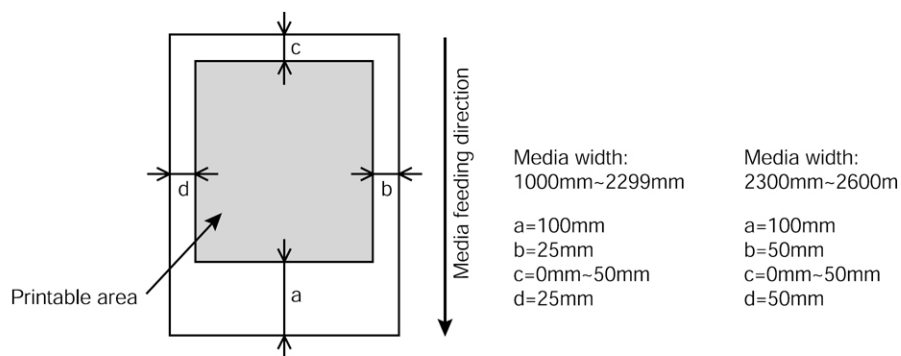
5.1.3 Precaution on storing media

⚠ Notes ⚠

- Store media away from high temperature, high humidity or direct sunlight.
- Unused roll media must be removed from the scroller, rewound tightly, and stored in the original wrapping bag and the box.
- Do not wet media.

5.1.4 The printing area

Printing areas of each media with the printer are as shown below.



⚠ Notes ⚠

- Printing margin C of the media feed direction is preset at the factory to 0mm as the initial value. To change printing margin C, reset it by following the steps in "Menu setup on the operation panel".
- Set the continuous printing item to "ON".
Refer to: "Joint printing menu"
- Change the value in the continuous margin item.
Refer to: "Joint margin menu"
- Printing margin A of the media feed direction becomes 0 mm automatically for following cases.
- When the continuous printing has been set as "ON".
Refer to: "Joint printing menu"

5.1.5 Criteria for the media feed

The criteria for the media feed that can be used for this product are as follows.
Before using media, confirm the following evaluation items.

⚠ Notes ⚠

- Among the following items, if following problems occurred, may not be warranted even if the Maintenance contract has been concluded. (Repair may require expense.)
- No.1 to 3, 6 to 8, 13, 14

⚠ Notes ⚠

- Please refer to: "Menu setup on the operation panel" for details of the setup menu.

No.	Evaluation Item	Evaluation Method	Criteria
1	Paper float, cockle, friction	1. Set "High" for the print head height menu of the operation panel. 2. Confirm the following operation. <ul style="list-style-type: none"> • Perform no printing, media feed only. • Perform 4m printing by 200% print. 	<ul style="list-style-type: none"> • No Paper float, cockle, friction • Or media should not make friction with the print head nozzle.
2	Anti static	1. Set following items for the Printing mode menu of the operation panel. <ul style="list-style-type: none"> • Printing quality:360dpi×180dpi • Printing direction: Bi-direction 2. Perform a printing of one-roll (min.20m).	No error printing, error feed, and machine-stop.
3	Slant	1. Set following items for the Printing mode menu on the operation panel. <ul style="list-style-type: none"> • Printing quality:360dpi×360dpi • Printing direction: Uni-direction 2. Perform printing.	Within 30m±0.1% with left/right edge of the media as the baseline
4	Detect the end of roll media.	After Media setting, confirm the end of roll media.	No error for detection of the end of roll media.
5	Media sensor	After Media setting, detect media.	No error for media detection sensor.
6	Weight, Diameter, Number of rolling	Confirm media visually.	<ul style="list-style-type: none"> • Max. 2600 mm • External diameter: Max. 250 mm • Weight: Max. 140kg
7	Thickness	Confirm media visually.	Within 0.08 mm-1.0 mm
8	Rolling start of cardboard core	Confirm media visually.	<ul style="list-style-type: none"> • Media breakaway without cardboard • core lift • No remains of adhesives on media.
9	Condition of both edges of roll media	Confirm media visually.	Align the edges equally. Tolerance: +2.0 mm, -1.5 mm <ul style="list-style-type: none"> • The printable side is outside.
10	Roll direction	Confirm media visually.	<ul style="list-style-type: none"> • Printable side with inside will not be guaranteed.

No.	Evaluation Item	Evaluation Method	Criteria
11	Damage, wrinkle, stain, foreign materials on media	Confirm media visually.	No damage, wrinkle, stain, and foreign materials on media.
12	Cardboard core I.D.	Confirm card board core visually.	<ul style="list-style-type: none"> • Diameter: 3". (tolerance:±3mm) • • Length: Max. 2640mm • Projection from the edge of roll media: <ul style="list-style-type: none"> ○ Right: Max. 25 mm ○ Left: Max. 25 mm • Full insertion of scroller to media flange. • No slipping
13	Curl	Confirm media visually.	<ul style="list-style-type: none"> • No float by the curl when sticking media to the media guide. • No friction with the print head nozzle during printing.
14	Scuffing	Confirm media visually.	No scuffing on media surface and edge face.

5.1.6 Media Feed Compensation (Distance Adjust)

Be sure to read and understand the safety warnings before handling the printer.

When used?

Depending on the thickness of the media, the media feed amount will have to change. If printing results show following symptoms:

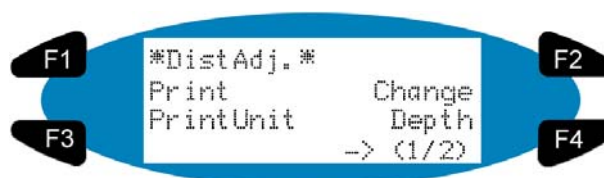
- Overlapped printing images
- White lines on printing image

Then, adjust the media feed compensation value with the following procedure.

Procedure:

Step 1: Go to the 'Media feed compensation' menu on the operation panel by following "Menu setup on the operation panel". See image below.

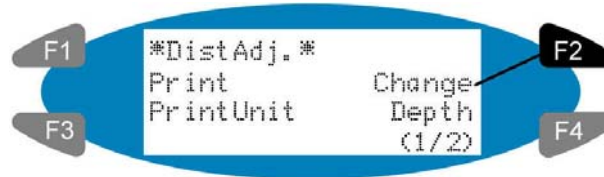
- The 'Media feed compensation' menu is named 'DistAdj.' menu on the operation panel.
- Refer to: "Printing by Media feed compensation menu" for more details about all the functions in the 'Media feed compensation' menu.



Step 2: Push the [F1] key on the operation panel to perform printing by media feed compensation.



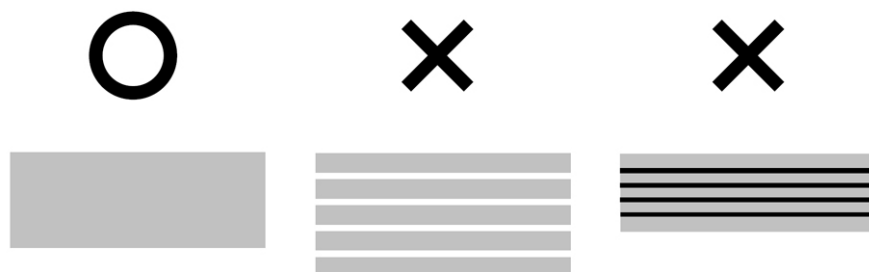
Step 3: When printing with media feed compensation has been finished, push the [CANCEL] key on the operation panel.



Step 4: Press the [F2] key of the control panel to change the media feed value.



Step 5: Push the [F2] key or [F4] key on the operation panel to increase (+) or decrease (-) the media feed value, using the print result, examples shown below.



Input the parameter

No adjustment needed Decrease media feed (-) Increase media feed (+)

Step 6: Push the [ENTER] key on the operation panel to save the adjusted value.

- After setting, shift to the previous upper menu.

Step 7: Repeat Step 2 to Step 7 until a good print result has been obtained.

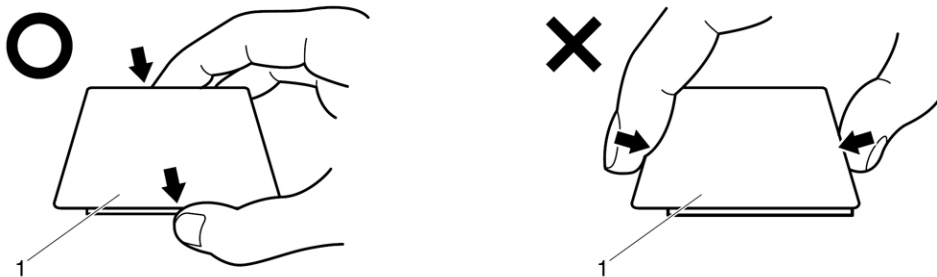
5.1.7 Installing media retainers

Variations in quality and used conditions could cause the edges of the media to curl, resulting in damage to the media by the print head surface. To prevent this, use the media retainers to reduce curling of the media.

Use the following procedure to install the media retainers.

Handling the media retainers:

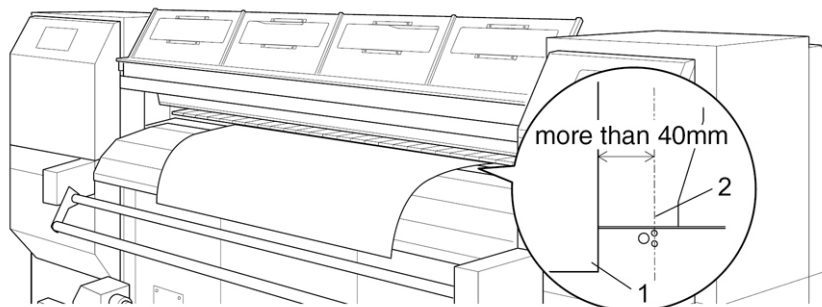
When installing and removing the media retainer, handle it as shown in the figure below. Mishandling the media retainer could result in bent metal parts that interfere with the print head.



No.	Name
1	Media retainer

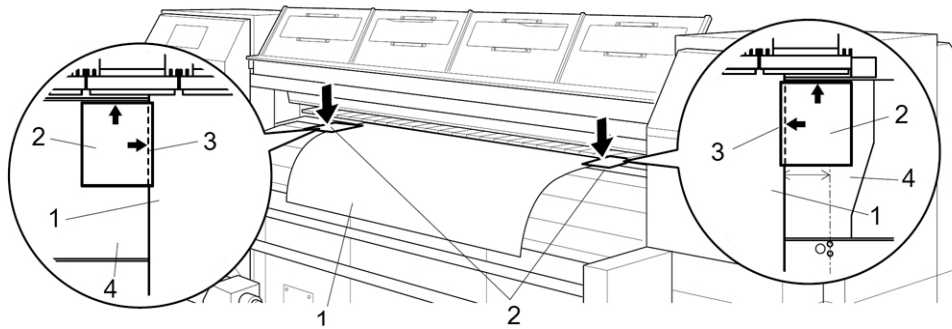
Installing procedure:

Step 1: Load the media so that the distance from the edge of the media to the media loading position is at least 40 mm.
Refer to: "Loading roll media"



No.	Name
1	Roll media
2	Media loading position

Step 2: Align the alignment line on the media retainers to the edge of the media with, and install the media retainers on the platen as shown on the image below.



No.	Name
1	Roll media
2	Media retainers
3	Alignment line
4	Platen

Notes

- When installing the media retainers, be sure that the magnet in the rear does not stick out from the stainless steel part of the platen to prevent that the media retainers will come off and interfere with the print head.

Step 3: Make sure that the media retainers do not interfere with the media as it is fed through the printer.

Notes

- If there is interference with the media as it is fed through the printer even after the media holder plate has been installed, the media retainer should not be used.
- When removing the media retainer, slide the plate on the platen for near side.

5.1.8 Head cleaning before printing

Be sure to read and understand the safety warnings before handling the printer.

When used?

Before printing, perform purge and head cleaning to clean the print head surfaces and the nozzles.

Procedure:

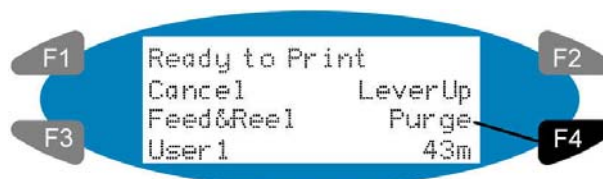
The procedure consists of 2 parts.

1. Perform a purge

Step 1 : Switch ON the printer.

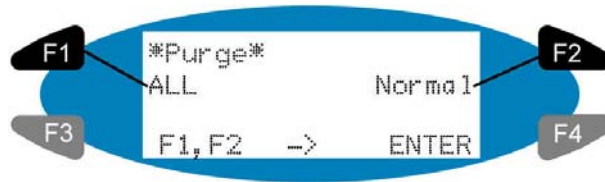
Step 2 : Verify the product is in the normal status.

Step 3 : Press the [F4] key of the control panel. See below.



Step 4 : Press the following keys on the control panel to change the settings :

- [F1] key: changing the ink colour
- [F2] key: changing the purge Mode



⚠ Notes ⚠

- The factory default settings (initial values) are set as follows.
 - Ink Colour: All
 - Purge mode: Normal
- Normally, there is no need to change the settings.
- For details on the settings, refer to "Head cleaning".

Step 5 : Press the [ENTER] key on the control panel.

- The settings are confirmed.
- The unit will start the purge process.
- Following message appears:



⚠ Notes ⚠

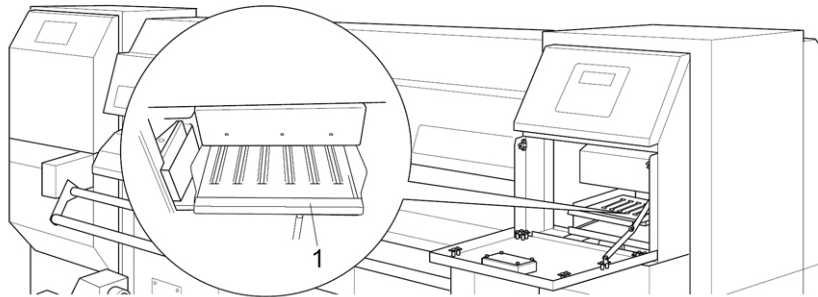
- When the [CANCEL] key on the control panel is pressed in the purge menu, the unit will return to normal status without performing the purge process.

Step 6 : Wait until the purge process is completed for all print heads and the control panel has returned to the normal status.

2. Wipe the heads

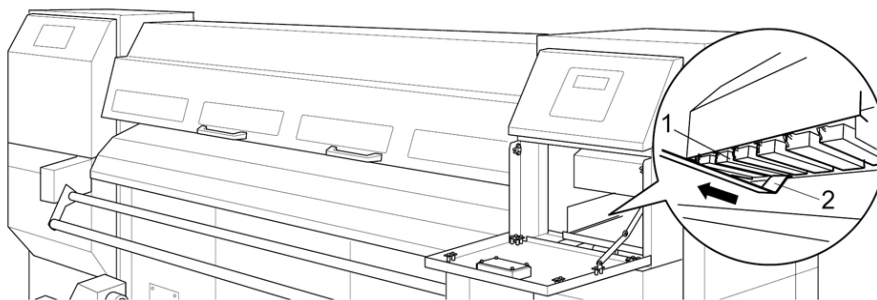
Step 1 : Open the maintenance cover.

Step 2 : Put the purge plate down the purge stand.



No.	Name
1	Purge plate

Step 3 : Lightly wipe off the ink accumulated on the print head using the attached print head wiper. Wipe from the back to the front of the head surface.



No.	Name
1	Print head
2	Print head wiper

⚠ Notes ⚠

- All print head surfaces should be wiped off, even after purging 1 colour only. Otherwise, ink may drip from the print head at which purging was not performed.

Step 4 : Lift the purge plate to fix it.

Step 5 : Close the maintenance cover; ensure that the cover has been firmly fixed.

5.2 TESTPRINTING

Follow the steps below to do a test print to confirm that your printer operates correctly.

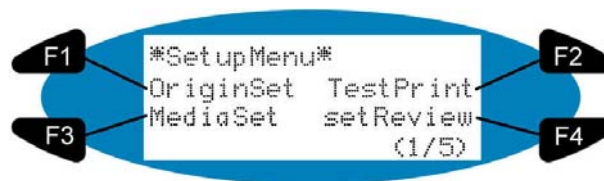
Step 1 : Switch ON the printer and set media.

Refer to “Switching the printer ON/OFF” and “Setting media type”

Step 2 : Verify that the product is in normal status.

Step 3 : Press the [MENU ▲] key or [MENU ▼] key on the operation panel.

- The screen shows the Setup Menu:

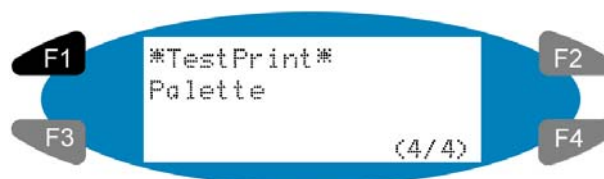
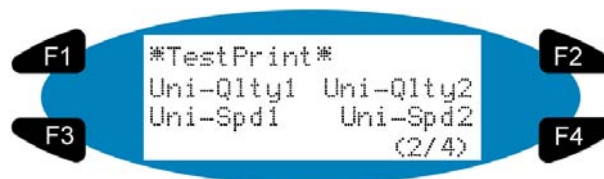


Step 4 : Press the [F2] key on the control panel.

- The screen shows the 'TestPrint (1/4)' menu:



- To go to the next TestPrint menu's, press the [MENU ▲] key or [MENU ▼] key on the operation panel.

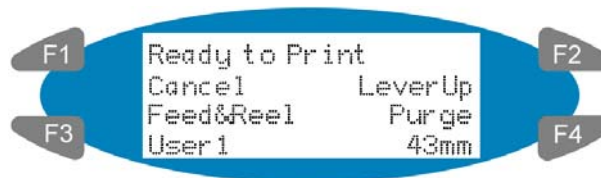


Step 5 : Select an item among the following and press the appropriate key, from [F1] key to [F4] key.

Setup items	Parameters	Descriptions
Test Print (1/4)	Setup	Perform Setup List printing. Refer to: "Setup List"
	SetupALL	Perform Setup list, the User Paper list, and the Print Mode list printing. Refer to: "Setup List"
	Nozzle Chk 1	Perform Nozzle check 1 (horizontal line) pattern printing. Refer to: "Nozzle Check"
	Nozzle Chk 2	Perform Nozzle check 2 (step line) pattern printing. Use this function when it is difficult to check if there is any clogging of nozzles, missing dots, or faint printing by using Nozzle check 1 pattern. Refer to: "Palette"
Test Print (2/4)	Uni-Qlty 1	To print an adjust pattern in quality mode, unidirectional-single path. Refer to: "Alignment"
	Uni-Qlty 2	To print an adjust pattern in quality mode, unidirectional-double path. Refer to: "Alignment"
	Uni-Spd 1	To print an adjust pattern in speed mode, unidirectional-single path. Refer to: "Alignment"
	Uni-Spd 2	To print an adjust pattern in speed mode, unidirectional-double path. Refer to: "Alignment"
Test Print (3/4)	Bi-Qlty 1	To print an adjust pattern in quality mode, Bidirectional-single path. Refer to: "Alignment"
	Bi-Qlty 2	To print an adjust pattern in quality mode, Bidirectional-double path. Refer to: "Alignment"
	Bi-Spd 1	To print an adjust pattern in speed mode, Bidirectional-single path. Refer to: "Alignment"
	Bi-Spd 2	To print an adjust pattern in speed mode, Bidirectional-double path. Refer to: "Alignment"
Test Print (4/4)	Palette	Perform Palette printing

Step 6 : Printing the selected item.

Step 7 : Wait until printing is finished and the printer has been returned to the normal status.



5.2.1 Setup List

Use this function to check the current status of the printer.

⚠ Notes ⚠

- Only when “Setup ALL” is selected, User Paper list and Print mode list are printed.
- For printing, refer to “Testprinting”.

Setup List

Information									
Model	= PJ-2640X	PRON	= V 1.01	[Error]					
Serial NO.	= EDAE000001	NRAM	= V 1.00	0: None []	2: None []	4: None []			
		MemorySize	= 128MB	1: None []	3: None []	5: None []			
Origin Setup			Layout Setup			Utility			
PF(Length)	= 000000mm		Joint	= Off		ErrorDisplay	= Off	TakeSpinIt	= Outside
CR(Width)	= 000000mm		JointMargin	= 0mm		PaperDet.	= On	LoadInit	= Outside
						LeftFlush	= Off	NegPress	= -2.1kPa
								PaperSlant	= On
								Mode Print	= Off
Media Setup			Function			Maintenance			
Media	= USER1		CRY->BLACK	= No					
MediaOut	= Off		Mirror	= Off					
InkDryTimer	= 0sec	Prev.Stick	= On			CR Motor Life	:	*****	
HeadHeight	= 2.5mm	Dist.Adj	= 100.00%			PF Motor Life	:	*****	
Stiffness	= Normal	Idle Heat	= Off			Lever Motor Life	:	*****	
LeverPress	= Normal	Idle Timeout	= Off			Head/D Motor Life	:	*****	
PlatenHeater	= 25°C					Takeup Motor Life	:	*****	
Drier	= Off					Sand Motor Life	:	*****	
						Black Head Life	:	*****	
						Cyan Head Life	:	*****	
						L.Cyan Head Life	:	*****	
						Magenta Head Life	:	*****	
						L.Magenta Head Life	:	*****	
						Yellow Head Life	:	*****	
Print Mode			Centronics						
PrintMode	= PrintModel		Mode	= Bi Centro					
Condition	= 360x360	RepeatPtn	= 1						
Interface	= Off	Count	= 1						
Priority	= Quality	Int. Time	= 0.0sec						
Direction	= BiDir								
Command Setup			Network						
ImageReso.	= 360dpi		IP Address	= 000.000.000.000					
OnlineTimer	= 0sec		Subnet	= 255.255.255.000					
			Gateway	= 000.000.000.000					
			FileMng.						
			WriteMode	= Off					

USER PAPER LIST

User 1 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 5 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 9 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 13 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C
User 2 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 6 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 10 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 14 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C
User 3 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 7 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 11 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 15 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C
User 4 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 8 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 12 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C	User 16 InkyDryTime = 0sec HeadHeight = 2.5mm Stiffness = Normal LeverPress = Normal PlatenHeater = 30°C

Print Mode List

Print Mode 1 Condition = 360x360 Interface = Off Priority = Speed Direction = BiDir	Print Mode 2 Condition = 360x360 Interface = Off Priority = Speed Direction = BiDir	Print Mode 3 Condition = 360x360 Interface = Off Priority = Speed Direction = BiDir	Print Mode 4 Condition = 360x360 Interface = Off Priority = Speed Direction = BiDir
--	--	--	--

5.2.2 Nozzle Check

Be sure to read and understand the safety warnings before handling the printer.

Use this function to check if there is any clogging of the nozzles, missing dots, or faint printing.

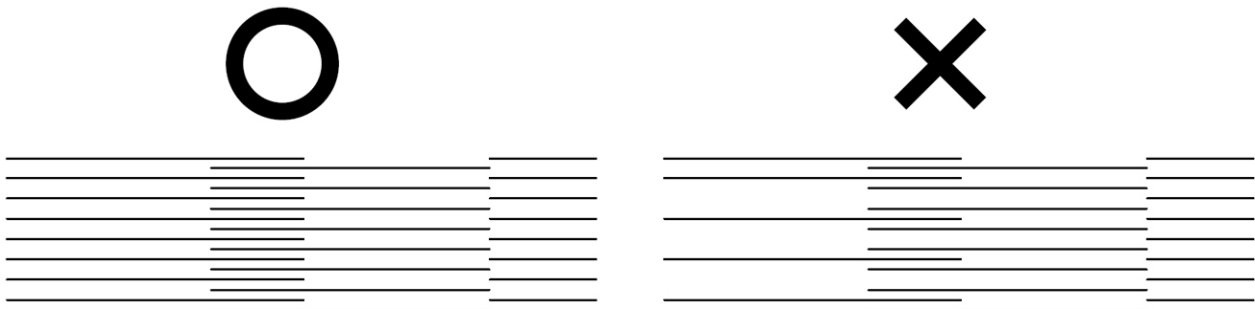
⚠ Notes ⚠

- If printing quality declines, or if missing dots are evident after the nozzle check, the print heads need to be cleaned.
- Refer to: "Head cleaning" to perform head cleaning.
- After finishing the head cleaning, perform the nozzle check again.

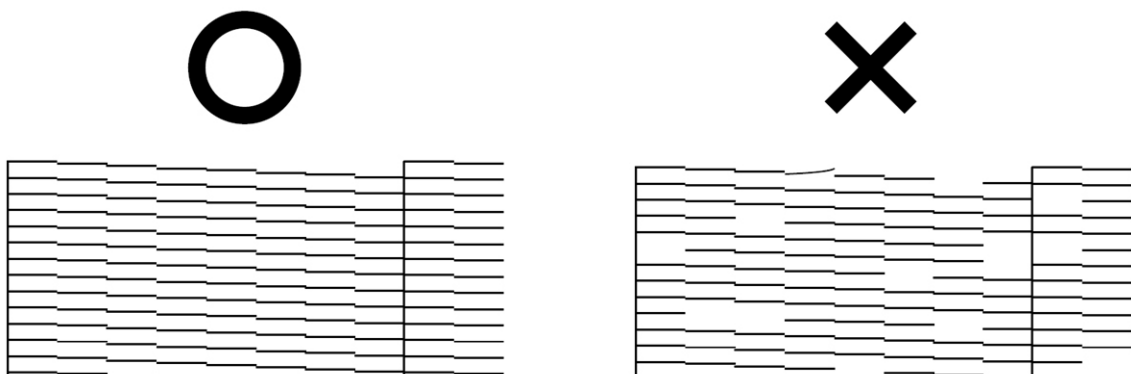
⚠ Notes ⚠

- For printing, refer to "Testprinting".

- Nozzle Check 1



- Nozzle Check 2



5.2.3 Alignment

Be sure to read and understand the safety warnings before handling the printer.

When used?

Use this function to adjust the print quality for best results.

⚠ Notes ⚠

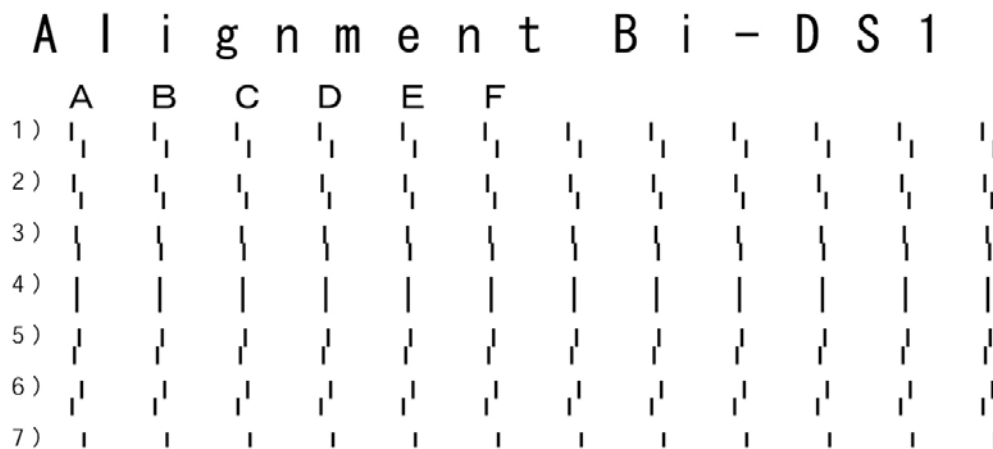
- The print quality of your printer is pre-adjusted when it is shipped. Use this function when the installation environment of the printer or media type has been changed and print quality declines.

⚠ Notes ⚠

- For printing, refer to “Testprinting”.

Procedure:

- Switch ON the printer and set the media.
- Print on adjustment pattern to adjust printing to align according to “Testprinting”.
- Determine the line number (1 to 7) in which the printed line has the best quality. In image below, this is line no. 4 for all heads (A to B).



- Press either the [F2] key or [F4] key to select the number for the line chosen in the previous step. (example below shows display for head A)



- Press the [ENTER] key on the operation panel to register the “Head” setting value.

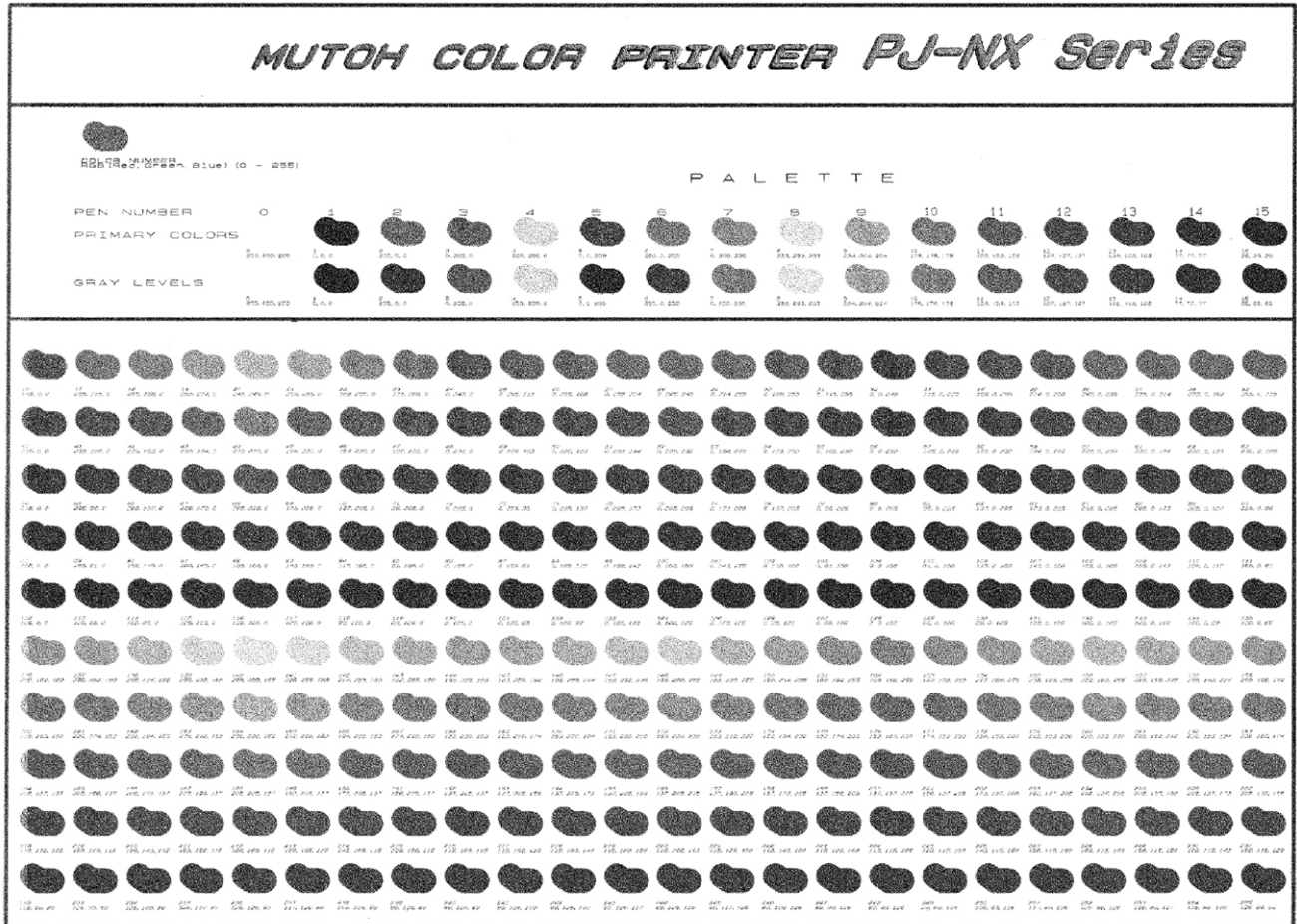
Repeat Steps 3 to 5 for heads B to F.

5.2.4 Palette

This is used when comparing the pen colour setting of the computer and the drawn colour of the product.

⚠ Notes ⚠

- For printing, refer to “Testprinting”.



5.3 MEDIA FEED COMPENSATION (DISTANCE ADJUST)

Be sure to read and understand the safety warnings before handling the printer.

When used?

Depending on the thickness of the media, the media feed amount will have to change. If printing results show following symptoms:

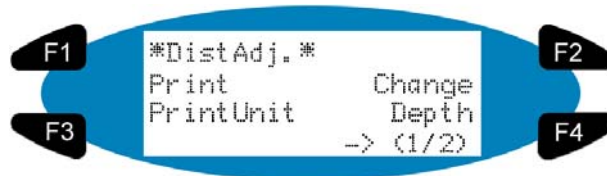
- Overlapped printing images
- White lines on printing image

Then, adjust the media feed compensation value with the following procedure.

Procedure:

Step 1 : Go to the 'Media feed compensation' menu on the operation panel by following "Menu setup on the operation panel". See image below.

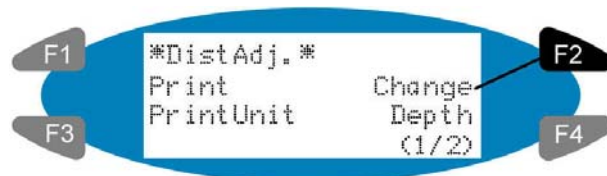
- The 'Media feed compensation' menu is named 'DistAdj.' menu on the operation panel.
- Refer to: "Printing by Media feed compensation menu" for more details about all the functions in the 'Media feed compensation' menu.



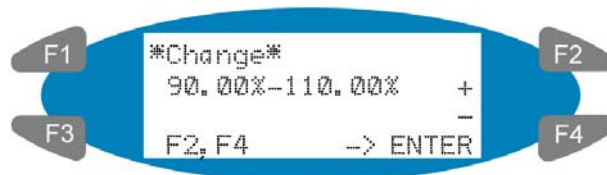
Step 2 : Push the [F1] key on the operation panel to perform printing by media feed compensation.



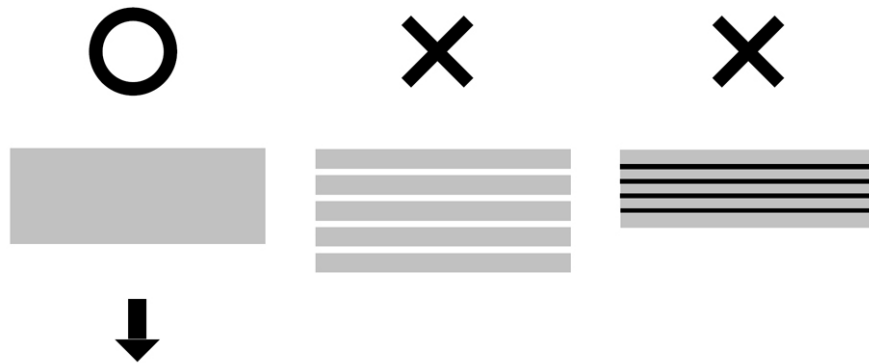
Step 3 : When printing with media feed compensation has been finished, push the [CANCEL] key on the operation panel.



Step 4 : Press the [F2] key of the control panel to change the media feed value.



Step 5 : Push the [F2] key or [F4] key on the operation panel to increase (+) or decrease (-) the media feed value, using the print result, examples shown below.



Input the parameter

No adjustment needed Decrease media feed (-) Increase media feed (+)

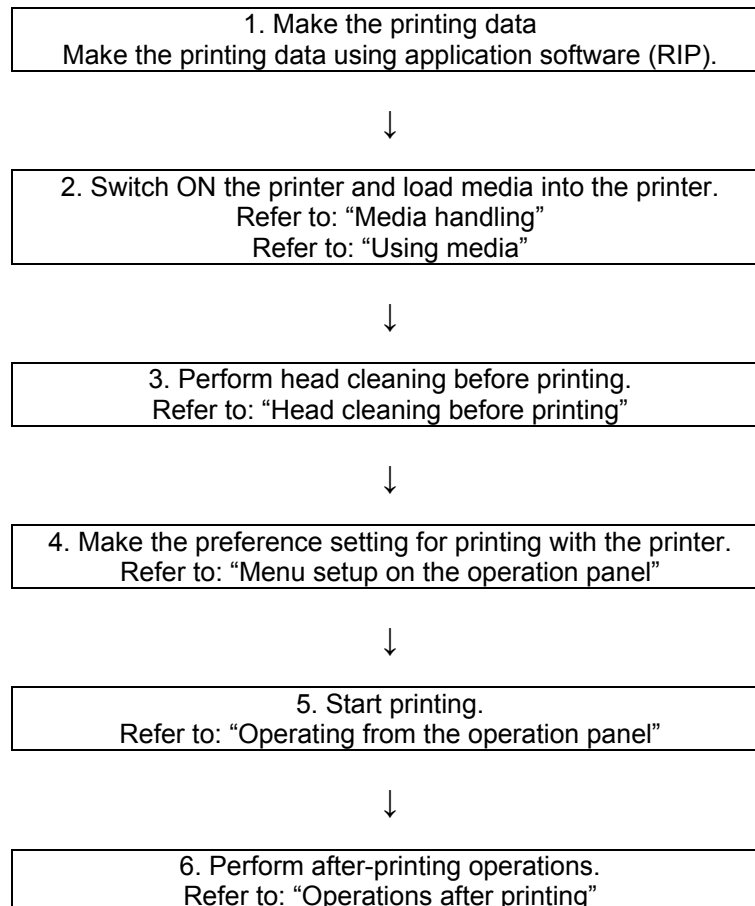
Step 6 : Push the [ENTER] key on the operation panel to save the adjusted value.

- After setting, shift to the previous upper menu.

Step 7 : Repeat Step 2 to Step 7 until a good print result has been obtained.

5.4 PRINTING FLOW

The following chart illustrates the procedure for drawing with the printer. Refer to each item as necessary.



⚠ Notes ⚠

- Do not open the front cover during printing. Doing so may stop the printer to print. Though the printer resumes printing after you close the front cover, the quality of printing cannot be guaranteed.

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6 PRINTER MENU

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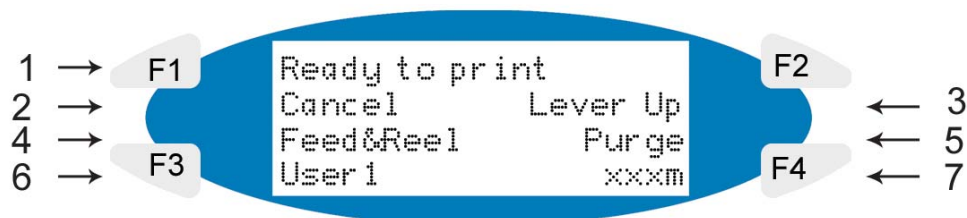
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6.1 HOW TO WORK IN THE MENU

Please find below all necessary information on how to switch, select and cancel menu items.

6.1.1 Main screen

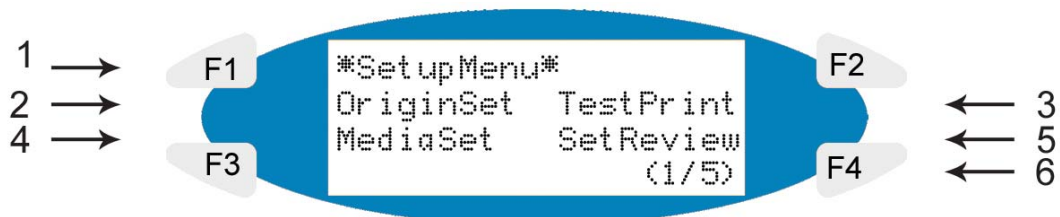
When powering ON the printer, it will (when no errors occur) start up in its main screen. The function of each key is explained below.



No	Description	Example
1	Displays the current status of the printer	Ready to print
2	Displays the function assigned to the [F1] key	Cancel
3	Displays the function assigned to the [F2] key	Lever Up
4	Displays the function assigned to the [F3] key	Feed&Reel
5	Displays the function assigned to the [F4] key	Purge
6	Displays the currently set media type	User 1-8
7	Displays the approximate amount of remaining media in metre. However, the amount is displayed only when either 3roll media 1" Roll media 2" or "Roll media 3" is selected in the roll media setting menu.	30m

6.1.2 Menu screen

In the SetupMenu, changes can be made to the printer settings. The content displayed on the LCD monitor of the operation panel is as follows



No	Description	Example
1	Displays the setting menu name currently set	SetupMenu
2	Displays the function assigned to the [F1] key	OriginSet
3	Displays the function assigned to the [F2] key	TestPrint
4	Displays the function assigned to the [F3] key	MediaSet
5	Displays the function assigned to the [F4] key	SetReview
6	Displays the currently available functions of the [F1] key to the [F4] key or displays the page status if there are multiple pages for the currently displayed setting menu.	1/5

6.1.3 Changing between the screens

To change the printer status, follow the steps below.

6.1.3.1 From the main menu to the menu screen

Press either ▲ or ▼ on the operation panel when the printer is in the main screen to go to the menu screen.

6.1.3.2 From the menu screen to the main screen.

To switch from a menu screen to the main screen, following actions can be taken:

- Press the [CANCEL] key on the operation panel
- Leave the printer for 3 minutes when the status is in the setting menu display.

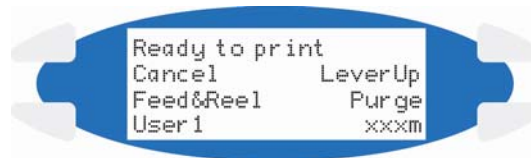
6.2 OPERATION PANEL IN STANDBY MODE

This section describes functions operated on the operational panel when the printer is in the normal status.

6.2.1 [F1] – *Cancel*

When data is being received and you want to cancel this operation, press the [F1] key to cancel the transfer

- Step 1 :** Verify the following regarding the condition of the printer.
- It is not currently printing

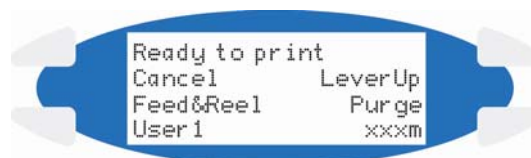


Status of the printer	Operation after the [F1] key is pressed
While printing	Stops printing and deletes data remaining in the printer.
While receiving/ converting	Deletes the data already received and converted, then deletes data from now on.
While waiting for the ink drying time	Stops waiting for the ink drying time and discharges the media.

6.2.2 [F2] - *Operating the pressure rollers*

When you want to switch the up and down movement of the pressure rollers follow the steps below.

- Step 1 :** Press the [F4] key on the operation panel.
- The printer works as follows.



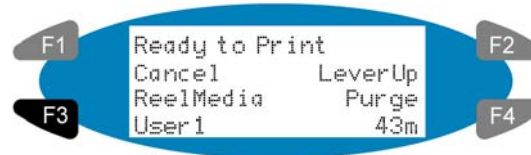
Status of the printer	Operation after the [F4] key has been pressed
The pressure rollers have been lowered The MEDIA SET lamp switches OFF.	The pressure rollers are lifted The MEDIA SET lamp will turn on (orange).
The pressure rollers have been raised. The MEDIA SET lamp switches ON (orange).	The pressure rollers are lowered. The MEDIA SET lamp will turn off.

6.2.3 [F3] – Winding the roll media

Perform winding of the media according to the procedure below.

Step 1: Verify that the printer is not printing

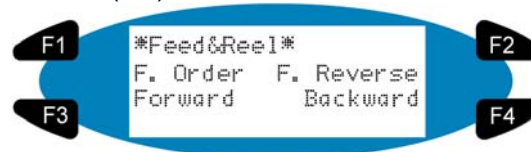
Step 2: Press the [F3] key on the control panel. See below.



Step 3: Press the appropriate key in the 'Feed&Reel' menu, press [F1] key to [F4] key or the down key to shift to the second 'Feed&Reel' menu.

- The printer works as follows:

Feed&Reel (1/2)



Feed&Reel (2/2)



Setup items	Parameters	Descriptions	Remarks
Feed & Reel	F. Order	The winding unit rotates in the advance direction. The roll media will be wound up by the winding unit.	This function is displayed when "ON" is selected in the Winding unit menu. Refer to: "Winding unit menu"
	F. Reverse	The winding unit rotates in the reverse direction. The roll media will be unrolled back out of the winding unit.	
	Forward	Feeds media forward.	This function is displayed when the media is set.
	Backward	Feeds media backward.	This function is displayed when the media is set.
	R. Reverse	The feed unit rotates in the reverse direction. The roll media will be unrolled back out of the feed unit.	This function is displayed when the pressure roller is up.

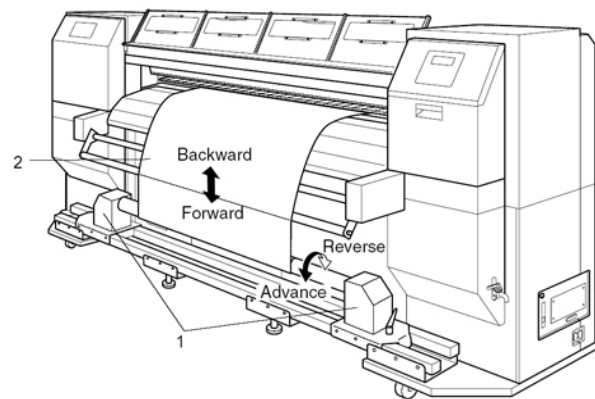
⚠ Notes ⚠

- When selecting "R. Reverse" to rewind the roll media, not to over-rewind. The scroller may come up from the winding unit and drop out.

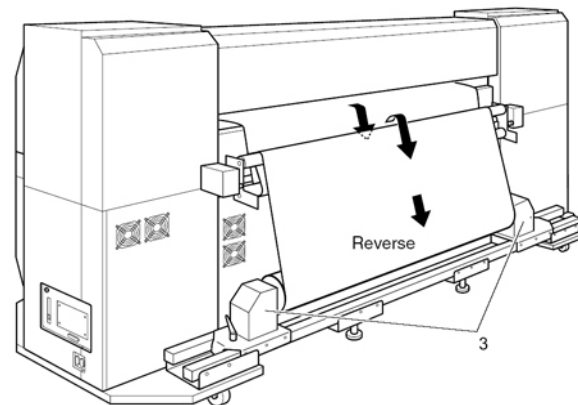
⚠ Notes ⚠

- The Operating directions of the winding unit and the roll media are shown below.

a. Front section



b. Rear section



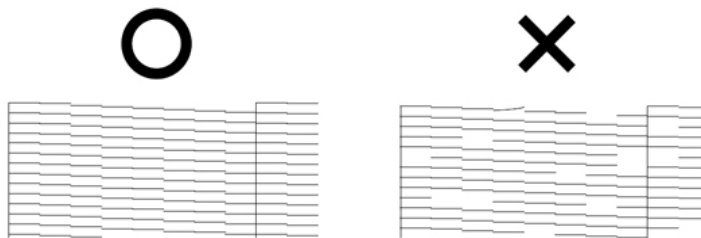
6.2.4 [F4] - Cleaning the heads

Procedure:

- Step 1:** Verify that the printer is at normal status.
- Step 2:** Follow "Testprinting", and perform a nozzle check print.
- Step 3:** Refer to the illustrations below to verify the condition of the print head.
- a. Nozzle Check 1



- b. Nozzle Check 2



Step 4: Perform head cleaning according to "Head cleaning before printing".

⚠ Notes ⚠

- For the settings on the purge menu, see table on the next page.
- The < > in the table are default factory settings (initial values).

Setup items	Key name	Parameters	Descriptions
Ink colour	F1	<All2>	The ink colour to be purged is selected. <ul style="list-style-type: none"> • All2: Print head purge processes are performed for each colour at the same time. This item uses to stabilize condition of the print head nozzle. • All: Print head purge processes are performed for each colour • Other: Print head purge processes are performed for the selected colour
		All	
		Black	
		Cyan	
		Light Cyan	
		Magenta	
		Light Magenta	
		Yellow	
Purge mode	F2	Economy (All2 only)	The amount of ink discharged during the purge process is selected. <ul style="list-style-type: none"> • Economy: The ink is discharged less than in the "Normal" mode. • Normal: Recommended in this process. • Powerful: The ink is discharged more than in the "Normal" mode. Select when the print head can not be recovered by performing "Normal" mode. • Continuous: Purge process is performed individually for "Normal" mode.
		<Normal>	
		Powerful (All2 only)	
		Continuous	
		–	
			[CANCEL] key: Finishes the purge process when "Normal" mode is selected.

Step 5: After head cleaning, perform nozzle check printing again, and check the condition of the head.

⚠ Notes ⚠

- If the smearing or misprinting has not been solved after performing a cleaning one time, change the ink colour and the purge mode to the following settings, then repeat the head cleaning.
 - Ink colour: except "All2"
 - Purge mode: "Normal"
- If the smearing or misprinting has not been solved after performing a cleaning a few times, please refer to: "Troubleshooting", and take appropriate measures.
- If printing problems are not corrected by increasing purge mode to "Powerful", clean off the print head surface using a poly-knit wiper soaked in jet wash fluid, then perform head cleaning again.

6.3 OPERATION PANEL DURING PRINTING

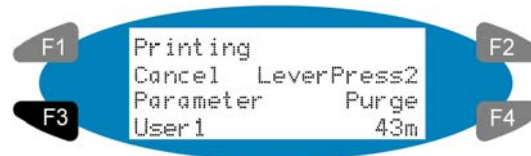
When sending a file to your printer, following messages can be displayed.

6.3.1 *Parameter change*

Step 1 : Verify that the printer is in the following operations.

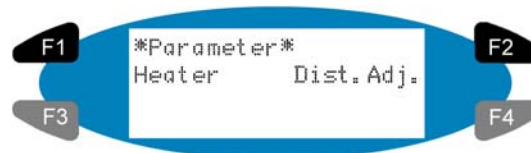
- Receiving data
- Analysing data
- Printing data

Step 2 : Press the [F3] key on the operation panel to shift to the Parameter menu.



Step 3 : Press the [F1] key or the [F4] key in the 'Parameter' menu on the operation panel.

- The printer performs following operations:



Setup items	Parameters	Descriptions
Parameter	Heater	Perform following operations. <ul style="list-style-type: none"> • Checking heater temperature • Setting each heater temperature
	Dist Adj.	Change media feed compensation value.
	—	<ul style="list-style-type: none"> • [CANCEL] key: Returns to the normal status.

Step 4 : Adjust the parameters of the heaters or media feed. See below for further explanation.

6.3.2 Heater

Checks and setups the heater temperature.



Setup items	Parameters	Descriptions
Heater	Temp Check	To check each heater temperature.
	Platen	To change platen-heater temperature.
	Drier	To change drier temperature.
	Updateparam	Saves the set up parameter.
	–	[CANCEL] key: Shifts to the previous hierarchy menu.

⚠ Notes ⚠

- The changed parameters are available for the current printing, but the settings will be not saved. To save the setting, be sure to perform the "Updateparam".

6.3.3 Media feed compensation

Changes the media feed compensation value.



Setup items	Parameters	Descriptions
Dist Adj.	Change	To change the media feed compensation value.
	Updateparam	To save the set up parameter.
	–	[CANCEL] key: Shifts to the previous hierarchy menu.

⚠ Notes ⚠

- The changed parameters are available for the current printing, but the settings will be not saved. To save the settings, be sure to perform the "Updateparam".

6.3.4 Changing Printing Mode

When the product is at a normal condition, press the [ENTER]-key to change the setup of the Printing Mode.

Step 1: Press the [ENTER] key on the control panel.

- The printer will shift to the 'Printing mode' Setup menu.

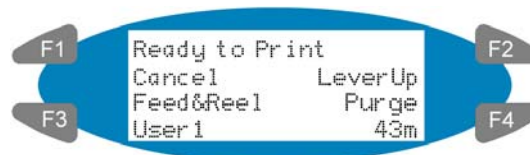


Step 2: Press the [F1] till [F4] keys to change Printing mode. See table below for further information.

Setup items	Key name	Parameters	Descriptions
Printing quality	F1	360dpi×180dpi	To set the printing quality to 360 dpi × 180 dpi
		360dpi×360dpi	To set the printing quality to 360 dpi × 360 dpi
		360dpi×720dpi	To set the printing quality to 360 dpi × 720 dpi
InterLace Setup	F2	OFF	To set the interlace method to OFF.
		2 pass	To set the interlace method to two path.
Priority	F3	Quality preference	To set the priority to Quality preference.
		Speed preference	To set the priority to Speed preference.
Printing direction	F4	Uni Dir.	To set the printing direction to uni-direction.
		Bi Dir.	To set the printing direction to bi-direction.

Step 3: Press the [ENTER] key after completion of setup.

- The setup has changed and the product shifts to the normal condition.



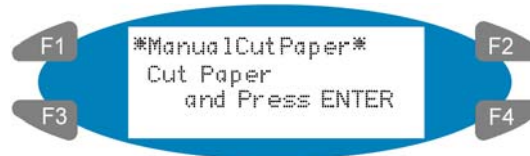
6.4 OPERATIONS AFTER PRINTING

6.4.1 Roll media cutting procedure

Be sure to read and understand the safety warnings before handling the printer.

After printing, the roll media will automatically advance to the media cut position.

The following message is displayed on the operation panel:

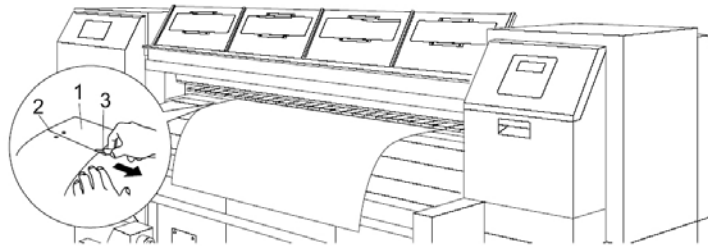


Cut the roll media according to the following procedures.

(1) When "Manual" has been selected in the media cut menu

Step 1: Open the front cover.

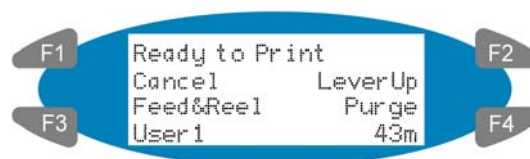
Step 2: Place a razor blade on the media cut groove on the platen, and cut the roll media.



Step 3: Close the front cover.

Step 4: Press the [ENTER] key of the control panel.

- The unit enters the normal status.



(2) When "OFF" is selected in the media cut menu

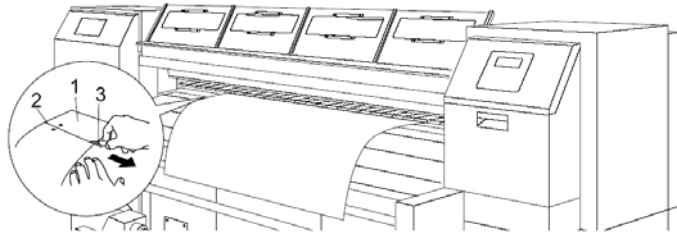
Step 1: Verify.

- There is no printing operation being performed.
- The control panel is in a normal status.
- The control panel MEDIA SET lamp has to be unlit.

Step 2: When altering the position where the roll media has to be cut, do so in the home position setup menu in "Menu setup on the operation panel", and advance the roll media to the position that needs to be cut.

Step 3: Open the front cover.

Step 4: Place a razor blade (3) on the media cut groove on the platen, and cut the roll media.

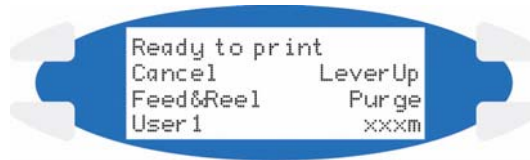


Step 5: Close the front cover.

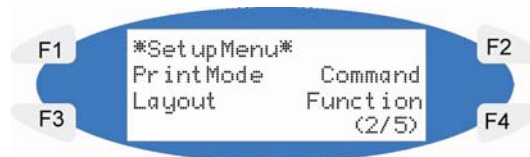
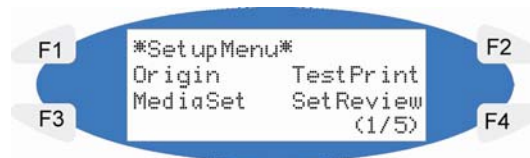
6.5 MENU OVERVIEW (1/5 – 5/5)

Follow the steps below to enter the menu settings.

Step 1 : Make sure the printer is in the normal mode



Step 2 : Press the [menu ▲] or [menu ▼] key

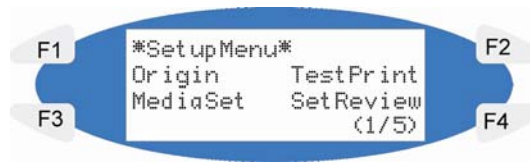


⚠ Notes ⚠

- “Network menu” is displayed when the network interface board has been installed.
- “File management” menu is displayed when the hard disk has been installed.

Setup items	Parameters	Descriptions
Setup menu (1/5)	Origin Set	To set the start position (origin) for printing data. Refer to: "Origin setup menu"
	Test Print	To perform Test print. Refer to: "Test print menu"
	Media Set	To perform various settings for media. Refer to: "Media setup menu"
	Set Review	To check the setup values for the printer. Refer to: "Set review menu"
Setup menu (2/5)	Print Mode	To perform various settings in the Printing mode. Refer to: "Printing mode menu"
	Command	To perform various settings in printer commands. Refer to: "Command setup menu"
	Layout	Makes various settings on layout function. Refer to: "Layout setup menu"
	Function	To perform various settings for processing of printing data. Refer to: "Function setup menu"
Setup menu (3/5)	Roll Setup	To perform various settings for roll media. Refer to: "Roll Media setup menu"
	Centro.	To set communication mode to Centronics interface. Refer to: "Centronics menu"
	Network	To set the network interface IP address. Refer to: "Network setup menu"
	Backup	To backup the set parameters. Refer to: "Backup setup menu"
Setup menu (4/5)	Utility	Makes various advanced function settings. Refer to: "Utility menu"
	File Mng.	Makes various settings for the processing method of the printing data sent from a computer to the installed hard disk in the printer. Refer to: "File management setup menu"
	Initial.	Returns parameters to the factory setting. Refer to: "Initialize setup menu"
Setup menu (5/5)	Data Dump	To perform dump printing for online function check. Refer to: "Data dump menu"
	Head Wash	To perform process for washing print head. Refer to: "Head wash menu"
	Long Save	To perform process for Long-term storage cleaning. Refer to: "Long-term storage cleaning" menu
	Mainte.	To check the parts' life cycle of the product. Refer to: "Maintenance status" menu
Setup menu (1/5 to 5/5)	–	[CANCEL] key: To cancel the setup menu, and to shift to the normal condition.

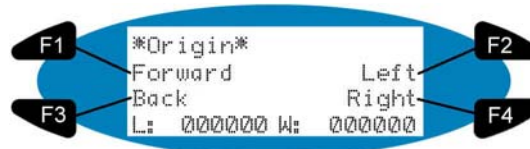
6.5.1 Setup menu 1/5

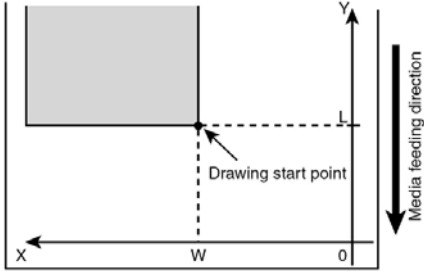
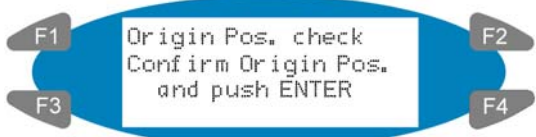


6.5.1.1 Origin setup menu

Sets printing start position (origin) for printing data.

Set this when you want to re-print to blank area of the printed media by changing the layout of the printing data.

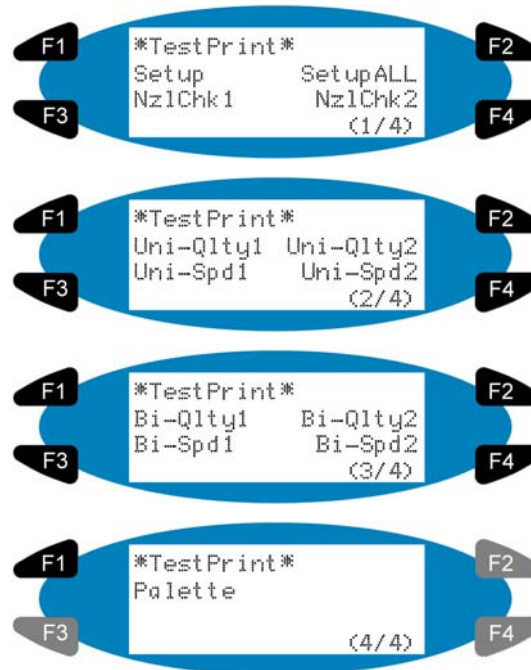


Setup items	Parameters	Descriptions
Origin Set	<ul style="list-style-type: none"> L: Media feed value W: Print head movement value (Unit: mm) 	<p>Change print head position and media feed amount by operating the following keys.</p> <ul style="list-style-type: none"> [F1] key: Increase setup value L [F2] key: Increase setup value W [F3] key: Decrease setup value L [F4] key: Decrease setup value W  <ul style="list-style-type: none"> [ENTER] key: Determines the setup values. The print head moves to drawing start point. The following messages are displayed on the operation panel. 
Setup items	Parameters	Descriptions
Origin Set	Origin Position check Confirm origin position and push ENTER.	<ul style="list-style-type: none"> [ENTER] key: Determines the setup values. The print head returns as before. The operation panel returns to the normal status.

⚠ Notes ⚠

- The print head automatically returns after none of the keys are pressed for a certain period (5 sec.) while checking the origin position, to avoid that the print head is drying out.

6.5.1.2 Test print menu



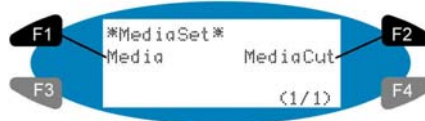
Setup items	Parameters	Descriptions
Test Print (1/4)	Setup	To perform Setup Listprinting. Refer to: "Setup List"
	Setup ALL	To perform Nozzle check 1 (horizontal line) pattern printing. Refer to: "Nozzle Check"
	Nozzle Chk 1	To perform Nozzle check 2 (step line) pattern printing. Use this function when it is difficult to check if there is any clogging of nozzles, missing dots, or faint printing by using Nozzle check 1 pattern. Refer to: "Nozzle Check"
	Nozzle Chk 2	To perform Palette printing. Refer to: "Palette"

Setup items	Parameters	Descriptions
Test Print (2/4)	Uni-Qlty 1	To print an adjustment pattern in quality mode, unidirectional-single path Refer to: "Alignment"
	Uni-Qlty 2	To print an adjustment pattern in quality mode, unidirectional-double path Refer to: "Alignment"
	Uni-Spd 1	To print an adjustment pattern in speed mode, unidirectional-single path Refer to: "Alignment"
	Uni-Spd 2	To print an adjustment pattern in speed mode, unidirectional-double path. Refer to: "Alignment"
Test Print (3/4)	Bi-Qlty 1	To print an adjustment pattern in quality mode, bidirectional-single path Refer to: "Alignment"
	Bi-Qlty 2	To print an adjustment pattern in quality mode, bidirectional-double path Refer to: "Alignment"
	Bi-Spd 1	To print an adjustment pattern in speed mode, bidirectional-single path Refer to: "Alignment"
	Bi-Spd 2	To print an adjustment pattern in speed mode, bidirectional-double path. Refer to: "Alignment"
Test Print (4/4)	Palette	To perform Palette printing Refer to: "Palette"
Test Print (1/4 ~ 3/4)	-	[CANCEL] key: To shift to the previous hierarchy menu. Refer to: "Setup menu"

6.5.1.3 Media setup menu

Be sure to read and understand the safety warnings before handling the printer.

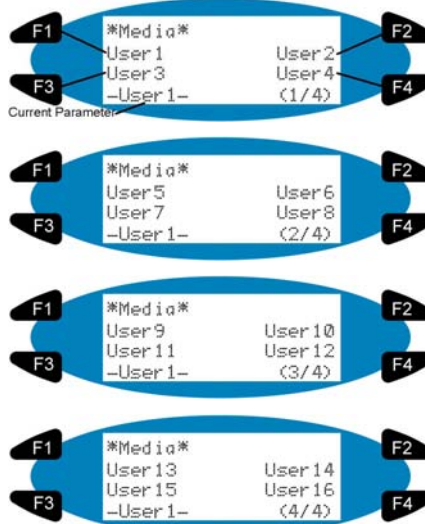
Performs various settings for media.



Setup items	Parameters	Descriptions
Media Set	Media	Makes setting for media type used for test printing. Refer to: "Media type menu"
	Media Cut	The method of cutting the media after printing is set here. Refer to: "Media cut menu"
	–	[CANCEL] key: To shift to the previous hierarchy menu. Refer to: "Setup menu"

6.5.1.4 Media type menu

Makes setting for media type used for test printing.



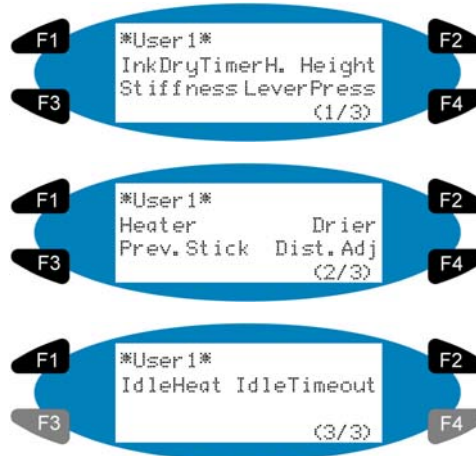
Setup items	Parameters	Descriptions
Media (1/4)	User 1	Makes setting for media type used for test printing. For setup values of printing operation, sixteen settings of "user media 1-16" can be set. Refer to: "User media menu"
	User 2	
	User 3	
	User 4	
Media (1/4)	User 5	
	User 6	
	User 7	
	User 8	
Media (3/4)	User 9	
	User 10	
	User 11	
	User 12	
Media (4/4)	User 13	
	User 14	
	User 15	
	User 16	
Media (1/4 to 4/4)	–	[CANCEL] key: shifts to the previous menu.Refer: "Media setup menu"

6.5.1.5 User media menu

Makes various settings on user defined media. In the User media menu, sixteen settings of "User 1" to "User 16" can be set.

⚠ Notes ⚠

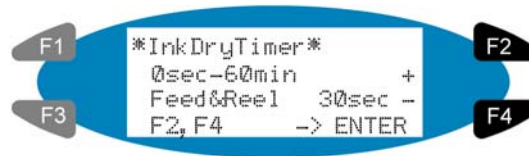
- If non-recommended media is used (user media), the following problems may occur.
 - Media detection error
 - Oblique, torn, and creased media
 - Media jams
 - Decrease in print quality due to blurring, missing, or smudging of ink
 - End detection error of roll media, etc.
- Problems caused by using non-recommended media will void the warranty. For more information, contact your local MUTOH dealer.



Setup items	Parameters	Descriptions
User 1 to 16 (1/3)	Ink Dry Timer	To set waiting period from the end of operation to the start of next printing to dry ink on the printed media. Refer to: "Ink Dry menu"
	Height	To set the distance (head height) from print head face to media. Refer to: "Head Height menu"
	Stiffness	Makes the setting for the absorbing power of the media to the printing board depending on the hardness of the media. Refer to: "Stiff menu"
	Lever Pressure	To set the pressure of the pressure lever. See "Lever pressure menu"
User 1 to 16 (2/3)	Heater	To set the platen heater temperature during printing is set. Refer to: "Platen heater menu"
	Drier	To set the ink drier temperature during printing is set. Refer to: "Drier menu"
	Prev. Stick	To set the Stick prevention operation when start printing. Refer to: "Prev. Stick menu"
	Media feed compensation	To perform various settings for media feed compensation Refer to: "Media feed compensation menu"
User 1 to 16 (3/3)	Idle heat	To set the idle heat temperature of the platen heater when the product is on standby. Refer to: "Idle heat menu"
	Idle timeout	To set the idle heat time of the platen heater when the product is on standby Refer to: "Idle timeout menu"
1 to 16 (1/3 to 3/3)	—	[CANCEL] key: To shift to the previous hierarchy menu. See "Media type menu"

6.5.1.6 Ink Dry menu

Sets the waiting period from the end of the operation to the start of the next printing operation, to dry ink on the printed media.



Setup items	Parameters	Descriptions
Ink Dry Timer	0 to <30 sec. > to 270 sec. to 60 min.	To change Ink Dry time by operating the following keys. <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. User media menu

6.5.1.7 Head Height menu

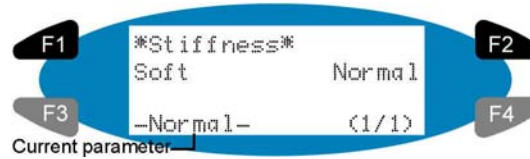
Sets the distance (head height) between the print head face and the media. Head height can be changed to different levels according to media thickness.



Setup items	Parameters	Descriptions
Head height (1/2)	<2.5mm>	Set the head height to 2.5 mm. when the media of normal thickness is used.
	3.0mm	Set the head height to 3.0 mm. when the thick media is used.
	3.5mm	Set the head height to 3.5 mm. when the further thick media is used.
	4.0mm	Set the head height to 4.0 mm when the media easily causing warp is used. Use this height when the head friction needs to be avoided in preference to the quality of printing result. This function does not allow good printing result.
Head height (2/2)	4.5mm	Set this height the head can contact with media in the 4.0 mm setting. Use this height when the head friction needs to be avoided in preference to the quality of printing result. This function does not allow good printing result.
Head height (1/2 to 2/2)	–	After the setting, shifts to the previous hierarchy menu.

6.5.1.8 Stiff menu

Sets media sticking force to the media guide according to media stiffness.

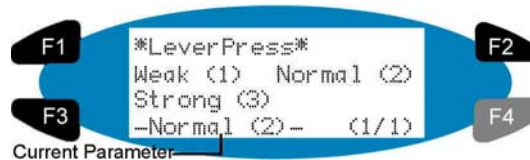


Setup items	Parameters	Descriptions
Stiffness	Soft	Setting for normal media.
	<Normal> j	Setting for soft media where media feeding errors and media jams may occur.
	–	After setting, shift to the previous hierarchy menu. User media menu

6.5.1.9 Lever pressure menu

Be sure to read and understand the safety warnings before handling the printer.

Sets the pressure of the pressure lever. Select the setting according to the media type.

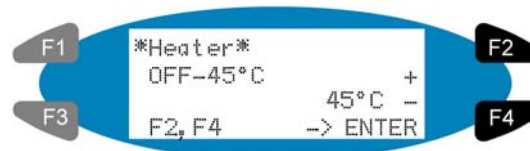


Setup items	Parameters	Descriptions
Lever pressure	Weak (1)	For sensitive media. The pressure is lower than normal.
	<Normal (2)>	For normal media.
	Strong (3)	For hefty media. The pressure is higher than normal to improve the feeding accuracy.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "User media menu"

6.5.1.10 Platen heater menu

Be sure to read and understand the safety warnings before handling the printer.

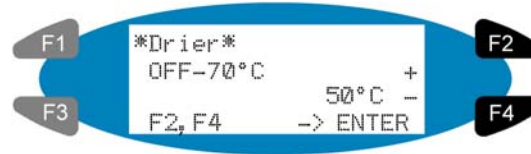
The platen heater temperature during printing is set.



Setup items	Parameters	Descriptions
Heater	OFF / 25 °C to <30 °C > to 45 °C	<p>To change Platen heater temperature by operating the following keys.</p> <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm the setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel the setup value, shifts to the previous hierarchy menu. <p>Refer to: "User media menu"</p>

6.5.1.11 Drier menu

Sets Ink Drier temperature during printing.



Setup items	Parameters	Descriptions
Drier	OFF / 50 °C to <60 °C > to 70 °C	Change Ink Drier temperature by operating the following keys. <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm the setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel the setup value, shifts to the previous hierarchy menu. Refer to: "User media menu "

6.5.1.12 Prev. Stick menu

Sets the Stick prevention operation when start printing.



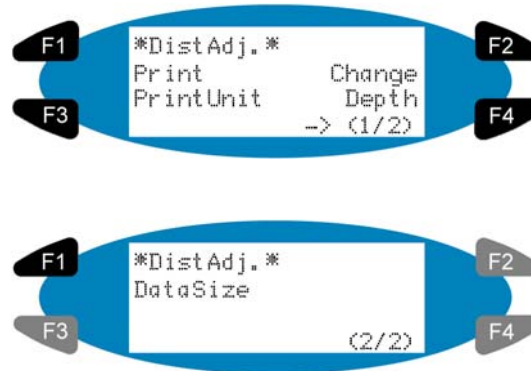
Setup items	Parameters	Descriptions
Prev. Stick	<OFF>	No stick prevention operation.
	ON	Performs stick prevention operation. To set media sticking force to the media guide according to media stiffness.
	—	After setting, shifts to the previous hierarchy menu. Refer to: "User media menu"

6.5.1.13 Media feed compensation menu

⚠ Notes ⚠

- Refer to "Media feed compensation" for more details.

Performs various settings for media feed compensation



Setup items	Parameters	Descriptions
Dist Adj. (1/2)	Printing	To perform printing with media feed compensation. Refer to: "Printing by Media feed compensation menu"
	Change	To change media feed compensation value. Refer to: "Change media feed compensation value menu"
	Print Unit	To set the printing intervals when perform printing with media feed compensation. Refer to: "Print Unit menu"
	Depth	To set the print depth during media feed compensation printing. Refer to: "Print depth menu"
Dist Adj. (2/2)	Data Size	Sets the print size per 1 colour of print pattern, during media feed compensation printing. Refer to: "Data size menu"
Dist Adj. (1/2 to 2/2)	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Media type menu"

6.5.1.14 Printing by Media feed compensation menu

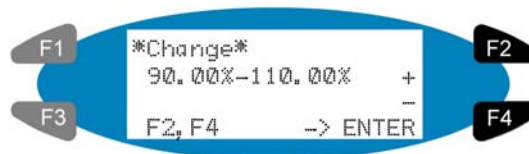
Performs printing by media feed compensation.



Setup items	Parameters	Descriptions
Dist Adj.	Printing	Now printing by media feed compensation. Wait for a while until printing has been finished. After printing, shift to the previous hierarchy menu. Refer to: "Media feed compensation menu"
	—	<ul style="list-style-type: none"> • [CANCEL] key: Product performs following operations. • Printing by media feed compensation is cancelled. • Eject media. • Shifts to the previous hierarchy menu. Refer to: "Media feed compensation menu"

6.5.1.15 Change media feed compensation value menu

Performs printing by media feed compensation.



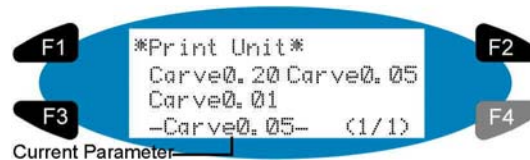
Setup items	Parameters	Descriptions
Change	90.00% to <100.00%> to 110.00%	To change media feed compensation value by operating the following keys. <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. Refer to: "Media feed compensation menu"

6.5.1.16 Print Unit menu

Sets the printing intervals when perform printing by media feed compensation.

⚠ Notes ⚠

- Refer to “Media feed compensation” for more details.
- For setup values of the print area menu, all settings of user media (1-16) are used in common.



Setup items	Parameters	Descriptions
Print Unit menu	Carve 0.20	Performs printing by media feed compensation at 0.20% steps of setup value from the current parameter (for rough adjustment).
	<Carve 0.05>	Performs printing by media feed compensation at 0.05% steps of setup value from the current parameter.
	Carve 0.01	Performs printing by media feed compensation at 0.01% steps of setup value from the current parameter (for fine adjustment).
	–	After setting, shifts to the previous hierarchy menu. Refer to: “Media feed compensation menu”

6.5.1.17 Print depth menu

Sets the print depth during media feed compensation printing.

⚠ Notes ⚠

- Refer to “Media feed compensation” for more details.



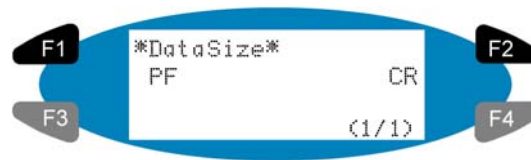
Setup items	Parameters	Descriptions
Depth	<Deep>	Prints with a dark colour.
	Light	Prints with a light colour.
	Both (PF)	Both print patterns of light and dark colours are printed vertically next to each other.
	Both (CR)	Both print patterns of light and dark colours are printed horizontally next to each other.
	–	After setting, shifts to the previous hierarchy menu. Refer to: “Media feed compensation menu”

6.5.1.18 Data size menu

Sets the print size per 1 colour of print pattern, during media feed compensation printing.

⚠ Notes ⚠

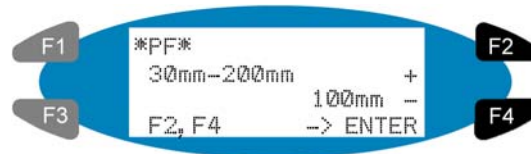
- Refer to “Media feed compensation” for more details.



Setup items	Parameters	Descriptions
Data Size	PF	Sets the print size in the vertical direction (PF: Media feed direction) Refer to: “PF size menu”
	CR	Sets the print size in the horizontal direction (CR: Carriage movement direction) Refer to: “CR size menu”
	–	[CANCEL] key: Cancels the setup value, shifts to the previous hierarchy menu. Refer to: “Media feed compensation menu”

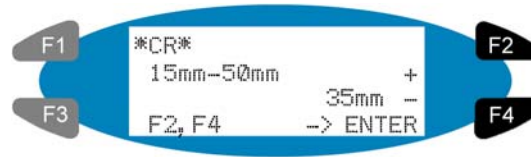
6.5.1.19 PF size menu

Sets the print size in the vertical direction (PF: Media feed direction) during media feed compensation printing.



Setup items	Parameters	Descriptions
PF	30mm to <85mm> to 200mm	To perform the following key operations to set the print size in the PF direction. <ul style="list-style-type: none"> [F2] key: Increases setup value. [F4] key: Decreases setup value. [ENTER] key: To confirm the setup value, shifts to the previous hierarchy menu. [CANCEL] key: To cancel the setup value, shifts to the previous hierarchy menu. Refer to: “Data size menu”

6.5.1.20 CR size menu



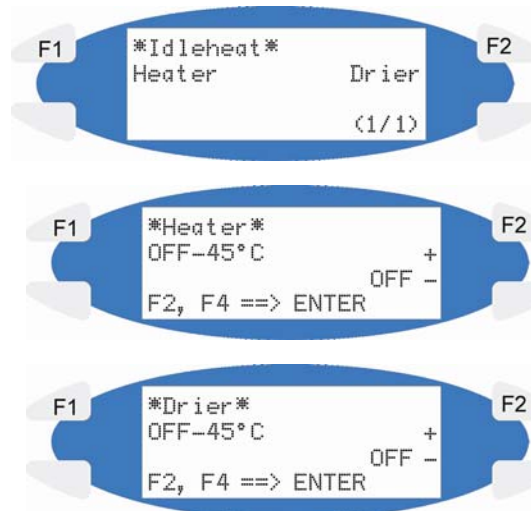
Setup items	Parameters	Descriptions
CR	15mm to <35mm> to 50mm	<p>Perform the following key operations to set the print size in the CR direction.</p> <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. <p>Refer to: "Data size menu"</p>

6.5.1.21 Idle heat menu

When the product is on standby, sets the idle heat temperature of the platen heater and the Drier.

⚠ Notes ⚠

- If set to "OFF" in the dryer menu, the product will not perform idle heating of the platen during standby. Refer to "Drier menu"
- If the settings of the idle heat menu are as follows, the platen heater / Drier will perform as shown below.
 - OFF: Idle heating of the platen heater / drier will not be performed. 30° to 70°: Idle heating is performed at the set temperature.
 - The temperature set in the idle heat menu cannot be set higher than the temperature set in the dryer menu.



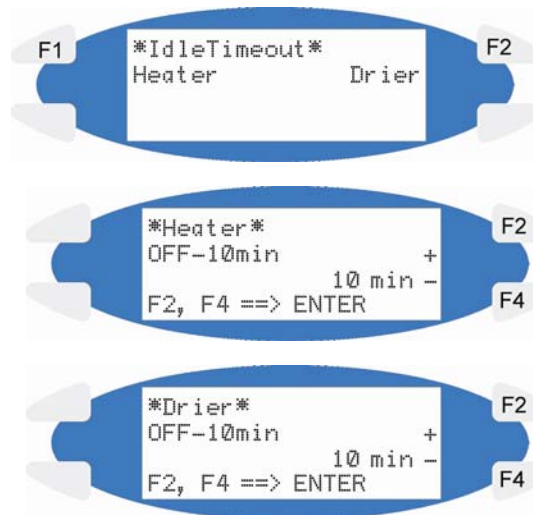
Setup items	Parameters	Descriptions
Idle heat	Heater / Drier	<p>Operate the keys below to change the idle heat temperature.</p> <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. <p>Refer to: "Media type menu"</p>

6.5.1.22 Idle timeout menu

When the product is on standby, sets the idle heat time of the platen heater / drier.

⚠ Notes ⚠

- If the settings of the heat timeout menu are as follows, the platen heater will each operate as shown below.
 - OFF: After reaching the idle heat temperature set in the idle heat menu, the idle heat temperature is maintained until start of printing.
 - 1 to 10 minutes: After reaching the idle heat temperature set in the idle heat menu, when the set time has passed, temperature is lowered to 30° and idle heating is continued.
 - Refer to: "Idle heat menu"

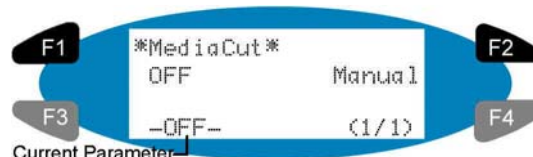


Setup items	Parameters	Descriptions
Idle timeout	Heater / Drier	<p>The idle heat time of the platen heater is changed with the following key operations.</p> <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. • Refer to: "Media type menu"

6.5.1.23 Media cut menu

Be sure to read and understand the safety warnings before handling the printer.

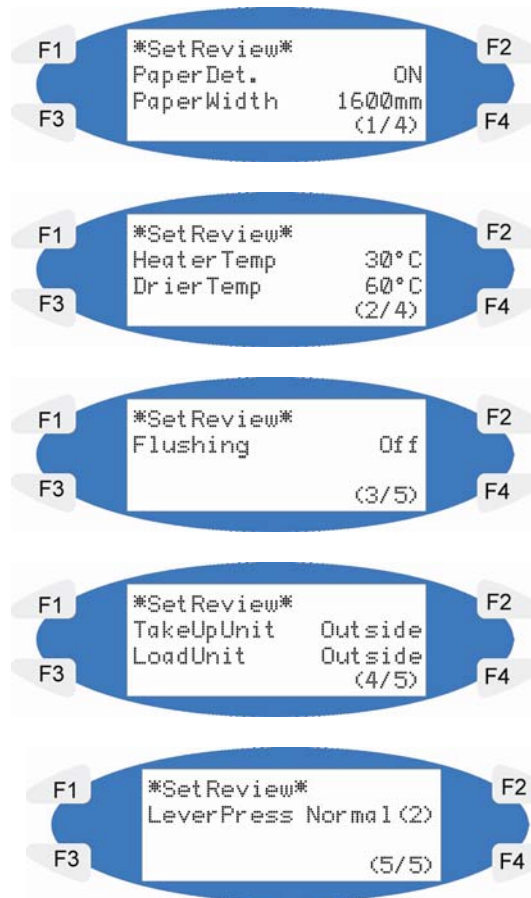
The method of cutting the media after printing is set here.



Setup items	Parameters	Descriptions
Media Cut	OFF	No media feed after printing.
	Manual	Feed media to the media cut position after printing. See "Roll media cutting procedure"
	—	After setting, shifts to the previous hierarchy menu. Refer to: "Media setup menu"

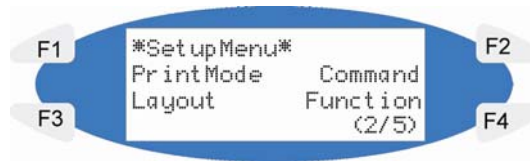
6.5.1.24 Set review menu

Display each setup value of the printer.



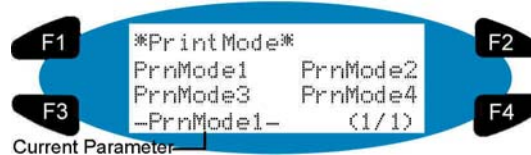
Setup items	Parameters	Descriptions
Set review (1/5)	Paper Det.	Displays the setup value of media detection. Refer to: "Media detection menu"
	Paper Width	Displays the media width as follows. <ul style="list-style-type: none"> Setup value of Paper Det. is "ON": The width of the media is displayed on the printer. Setup value of Paper Det. is "OFF": The width of the media set in the section "Media width menu" is displayed. Refer to: "Media width menu"
Set review (2/5)	Heater Temp.	Displays the value of the platen heater. Refer to: "Platen heater menu"
	Drier Temp.	Displays the value of the ink drier. Refer to: "Drier menu"
Set review (3/5)	Flushing	Displays the value of the Left Flush. Refer to: "Left flush menu"
Set review (4/5)	Take Up Unit	Displays the value of the winding unit. Refer to: "Winding unit menu"
	Load Unit	Displays the value of the feed unit. Refer to: "Feed unit menu"
Set review (5/5)	Lever pressure	Displays the value of the lever pressure. Refer to: "Lever pressure menu"
Set review (1/5 to 5/5)	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.2 Setup Menu 2/5



6.5.2.1 Printing mode menu

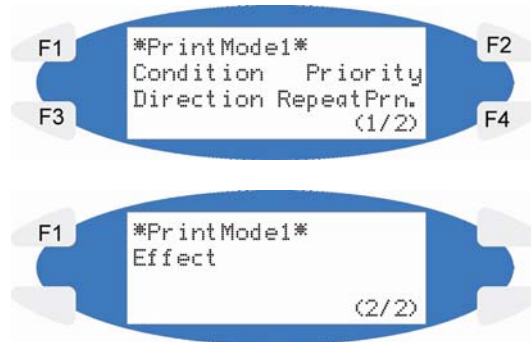
Performs various settings for printing mode.



Setup items	Parameters	Descriptions
Print Mode	Prn Mode 1	For each setup value of this mode, 4 settings can be chosen. Refer to: "Printing mode setup menu"
	Prn Mode 2	
	Prn Mode 3	
	Prn Mode 4	
	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.2.2 Printing mode setup menu

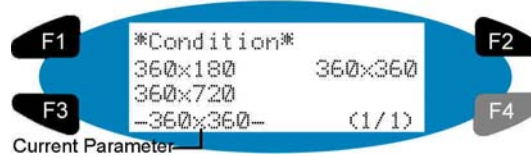
Perform various settings in the printing mode. For each setup value of printing mode, 4 settings can be chosen.



Setup items	Parameters	Descriptions
Prn Mode 1 to 4	Condition	To set printing quality. Refer to: "Printing quality menu"
	Priority	To set the printing speed while printing Refer to: "Priority menu"
	Direction	To set print head moving direction for printing. Refer to: "Printing direction menu"
	Repeat Prn	To perform various settings when printing is repeated with one printing data. Refer to: "Repeat printing menu"
	Effect	Set up the effect menu Refer to: "Effect menu"
	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.2.3 Printing quality menu

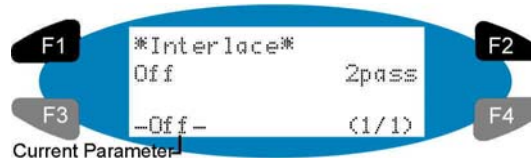
Sets printing quality in consideration with application, printing data and printing speed.



Setup items	Parameters	Descriptions
Condition	180×360dpi	The display changes to interlace setup items after the print quality items settings have been finished. Refer to: "InterLace Setup menu"
	<360×360dpi>	
	360×720dpi	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Printing mode setup menu"
	–	

6.5.2.4 Interlace Setup menu

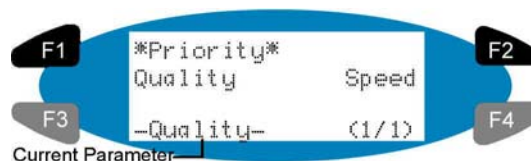
Sets InterLace for printing.



Setup items	Parameters	Descriptions
Interlace	OFF	No InterLace.
	2 pass	Ink is discharged two times per line.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Printing mode setup menu"

6.5.2.5 Priority menu

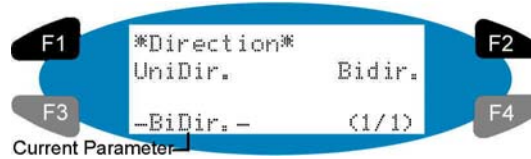
Sets printing speed while printing.



Setup items	Parameters	Descriptions
Priority	Quality	Performs in quality preference. Set when preferring quality to printing speed.
	<Speed>	Performs in speed preference. Set when preferring printing speed to quality.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Printing mode setup menu"

6.5.2.6 Printing direction menu

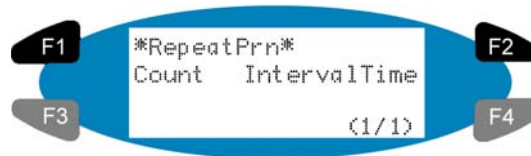
Sets print head moving direction for printing.



Setup items	Parameters	Descriptions
Direction	Uni Dir.	Prints one-directionally
	Bi Dir.	Prints bi-directionally.
	–	After setting, shifts to the previous hierarchy menu. Refer to: “Printing mode setup menu”

6.5.2.7 Repeat printing menu

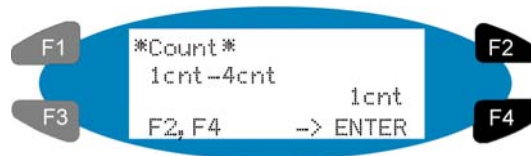
Perform various settings to repeat print.



Setup items	Parameters	Descriptions
Repeat Prn	Count	To set repeat times of printing with one printing line. Refer to: “Repeat times menu”
	Time	To set interval time for repeat printing. Refer to: “Interval time menu”
	–	After setting, shifts to the previous hierarchy menu. Refer to: “Printing mode setup menu”

6.5.2.8 Repeat times menu

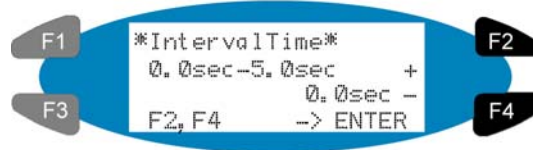
Set repeat times of printing with one printing line.



Setup items	Parameters	Descriptions
Count	1 cnt to 4 cnt	To change repeat times by operating the following keys. <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. Refer to: “Repeat printing menu”

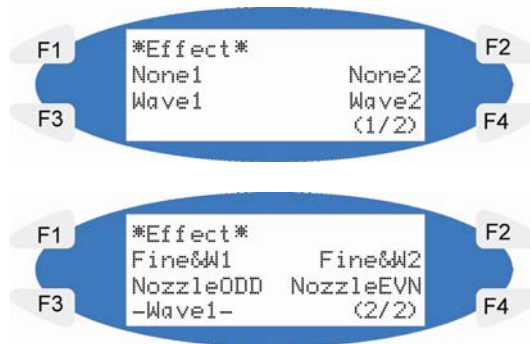
6.5.2.9 Interval time menu

Sets interval time for repeat printing.



Setup items	Parameters	Descriptions
Interval Time	<0.0 sec.> to 0.1 to 5.0 sec.	Change interval time by operating the following keys. <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. Refer to: "Repeat printing menu"

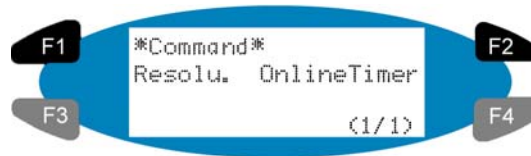
6.5.2.10 Effect setup menu



Setup items		Parameters	Descriptions
Effect	1/2	None 1	<ul style="list-style-type: none"> • The wave mode is not used.
		None 2	<ul style="list-style-type: none"> • If white lines or uneven print density appear in printed media in "None1" set to "None2"
		Wave 1	<ul style="list-style-type: none"> • The machine will print while using the wave.
		Wave 2	<ul style="list-style-type: none"> • It will improve the printing quality. • If white lines or uneven print density appear in printed media in "Wave1" set to "Wave2"
	2/2	Fine&W1	<ul style="list-style-type: none"> • The machine will print at a slower speed while using wave.
		Fine&W2	<ul style="list-style-type: none"> • Set up this menu when improving the printing quality compared with "Wave" • If white lines or uneven print density appear in printed media in "Fine&W1" set to "Fine&W2"
		NozzleODD	<ul style="list-style-type: none"> • Performs "None1" printing using one side of the nozzles of the print head. • Since only one side of the nozzles are used, printing speed becomes half of "None1" <p>This mode is for engineering purposes only!</p>
		NozzleEVN	<ul style="list-style-type: none"> • Performs "None1" printing using the other side of the nozzles of the print head that is used for "NozzleODD". • Since only one side of the nozzles are used, printing speed becomes half of "None1" <p>This mode is for engineering purposes only!</p>

6.5.2.11 Command setup menu

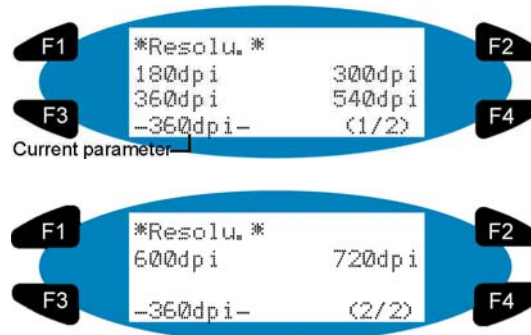
To perform various settings for printer commands.



Setup items	Parameters	Descriptions
Command	Resolu.	Makes settings for image resolution while printing with image data. Refer to: "Image resolution menu"
	Online Timer	Makes settings for the time from the end of receiving printing data from a computer to recognizing the end of printing data. Refer to: "Online time out menu"
	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.2.12 Image resolution menu

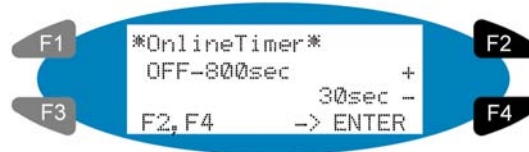
Makes settings for image resolution while printing with image data.



Setup items	Parameters	Descriptions
Resolu. (1/2)	180dpi	Makes settings for image resolution while printing with image data.
	300dpi	
	<360dpi>	
	540dpi	
Resolu. (1/2)	600dpi	After setting, shifts to the previous hierarchy menu. Refer to: "Command setup menu"
	720dpi	
Resolu. (1/2 to 2/2)	–	

6.5.2.13 Online time out menu

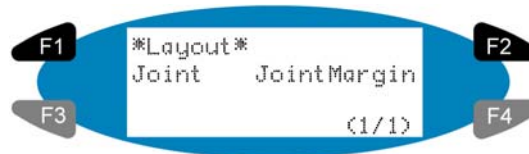
Sets time from the moment of receiving termination of printing data sent by computer to the recognition of end of printing data.



Setup items	Parameters	Descriptions
Online Timer	<OFF>/2sec to 30sec. to 800sec.	<p>Changes the Online time out time by operating the following keys.</p> <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup, shifts to the previous hierarchy menu. <p>Refer to: "Command setup menu"</p>

6.5.2.14 Layout setup menu

Makes various settings on layout function.



Setup items	Parameters	Descriptions
Layout	Joint	Sets joint printing. Refer to: "Joint printing menu"
	Joint margin	In the joint printing item, when set to 'ON', the media feed direction margin for the second media and on is set here. Refer to: "Joint margin menu"
	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.2.15 Joint printing menu

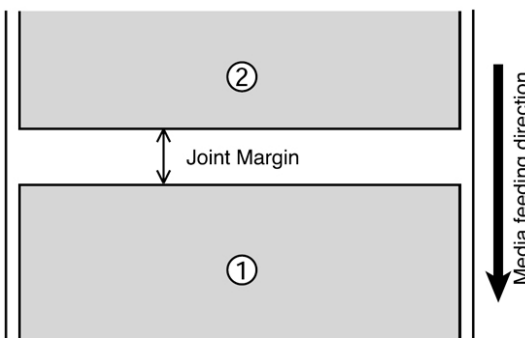


Setup items	Parameters	Descriptions
Joint	<OFF>	Does not perform jointing print.
	ON	Performs jointing print
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Layout setup menu"

6.5.2.16 Joint margin menu

In the joint printing item, when set to "ON", the media feed direction' margin for the second media is set here.



Setup items	Parameters	Descriptions
Joint margin	<0mm> to 50mm	<p>To change joint margin by operating the following keys.</p> <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup, shifts to the previous hierarchy menu. <p>Refer to: "Layout setup menu"</p> 

6.5.2.17 Function setup menu

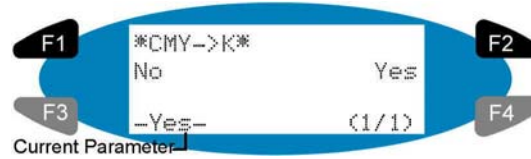
To perform various settings for processing of printing data.



Setup items	Parameters	Descriptions
Function	CMY→K	Makes settings for printing method to present black. Refer to: "CMY→K menu"
	Mirror	Set this to print reversed printing data. Refer to: "Mirror menu"
	—	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.2.18 CMY→K menu

Makes settings for printing method to present black.

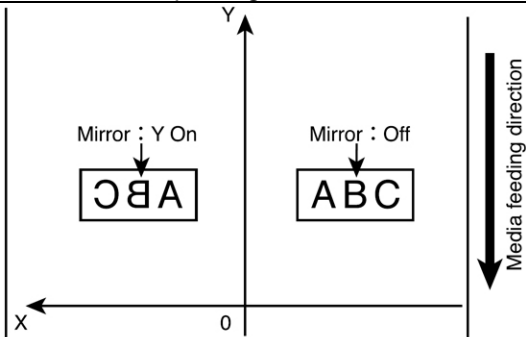


Setup items	Parameters	Descriptions
CMY→K	<No>	Use CMY (colour) ink and K (black) ink together.
	Yes	Always use K (black) ink.
	—	After setting, shifts to the previous hierarchy menu. Refer to: "Function setup menu"

6.5.2.19 Mirror menu

Sets this to print reversed printing data.



Setup items	Parameters	Descriptions
Mirror	<OFF>	No reversal of printing data.
	Y ON	
	—	After setting, shifts to the previous hierarchy menu. Refer to: "Function setup menu"

6.5.3 Setup menu 3/5



6.5.3.1 Roll Media setup menu

To perform various settings for roll media.



Setup items	Parameters	Descriptions
Roll Setup	Disable	Set this when roll media setup is not used.
	Roll 1	For each setup value of roll media, 3 settings can be set. See "Roll media length menu"
	Roll 2	
	Roll 3	
	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.3.2 Roll media length menu

Sets roll media length.



Setup items	Parameters	Descriptions
Roll 1 to 3	1m to <30m> to 99m	<p>Change the roll media length by operating the following keys.</p> <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup value, shift to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shift to the previous hierarchy menu. <p>Refer to: "Roll Media setup menu"</p>

6.5.3.3 *Centronics menu*

Be sure to read and understand the safety warnings before handling the printer.

Sets communication mode to Centronics interface.



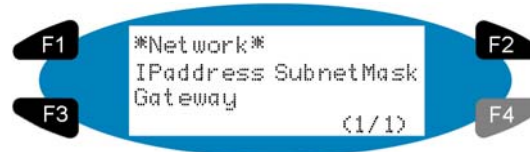
Setup items	Parameters	Descriptions
Centro.	Centro.	To set communication mode to Centronics mode.
	<Bi Centro.>	To set communication mode to Bi-Centronics mode.
	–	After setting, shifts to the previous hierarchy menu. Refer to: “Setup menu”

6.5.3.4 *Network setup menu*

Sets the network interface.

⚠ Notes ⚠

- Be sure to consult the network administrator before changing the network setup parameters.



Setup items	Parameters	Descriptions
Network	IP ADDRESS	To set the product IP address. Refer to: “IP address menu”
	Subnet mask	To set the product subnet mask. Refer to: “Setup menu”
	Gateway	To set the IP address of the connected gateway. Refer to: “Gateway menu”
	–	[CANCEL]: Shifts to the previous hierarchy menu. Refer to: “Setup menu”

6.5.3.5 IP address menu

Sets the product IP address.



Setup items	Parameters	Descriptions
IP address	<000.000.000.000> to 255.255.255.255	<p>To change the IP address, use the following keys.</p> <ul style="list-style-type: none"> • [F1] key: Shifts digit position of to-be-changed setup value to the left. • [F2] key: Increases setup value. • [F3] key: Shifts digit position of to-be-changed setup value to the right. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. <p>Refer to: "Network setup menu"</p>

6.5.3.6 Subnet mask menu

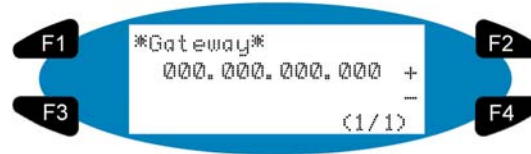
Sets the product subnet mask.



Setup items	Parameters	Descriptions
Subnet mask	000.000.000.000 to <255.255.255.000> to 255.255.255.255	<p>To change the subnet mask using the following keys.</p> <ul style="list-style-type: none"> • [F1] key: Shifts digit position of the to-be-changed setup value to the left. • [F2] key: Increases setup value. • [F3] key: Shifts digit position of the to-be-changed setup value to the right. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. <p>Refer to: "Network setup menu"</p>

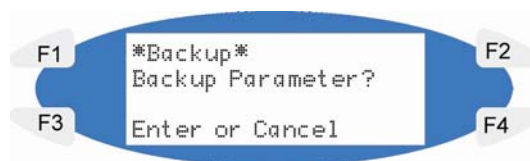
6.5.3.7 Gateway menu

Sets the IP address of the gateway assigned to the product.



Setup items	Parameters	Descriptions
Gateway	<000.000.000.000> to 255.255.255.255	<p>To change the IP address, use the following keys.</p> <ul style="list-style-type: none"> • [F1] key: Shifts digit position of the to-be-changed setup value to the left. • [F2] key: Increases setup value. • [F3] key: Shifts digit position of the to-be-changed setup value to the right. • [F4] key: Decreases setup value. • [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. <p>Refer to: "Network setup menu"</p>

6.5.3.8 Backup menu

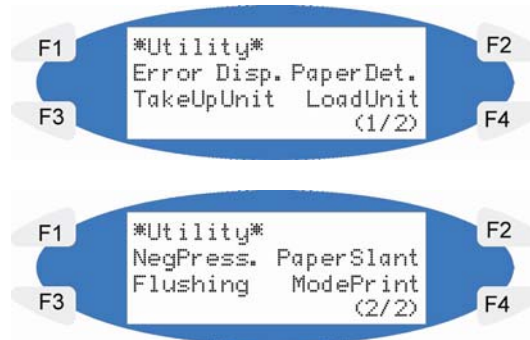


Setup list	Descriptions
Backup	Press ENTER if you want to back up your parameters.

6.5.4 Setup menu 4/5



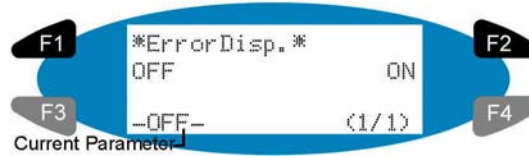
6.5.4.1 Utility menu



Setup items	Parameters	Descriptions
Utility (1/2)	Error Disp.	To set display method to the operation panel when minor error occurred. Refer to: "Error Display menu"
	Paper Det.	When media is initialized, set to perform detection of width and edge of the media. Refer to: "Media detection menu"
	Take Up Unit	To set the winding unit during printing. Refer to: "Winding unit menu"
	Load Unit	Sets the operation of the feeding unit. Refer to: "Feed unit menu"
Utility (2/2)	Neg Press	The operational pressure of the vacuum pump is set here. Refer to: "Negative pressure pump menu"
	PaperSlant	To set to detect a slant while feeding media. Refer to: "Slant check menu"
	Flushing	To set the operation of the flushing. Refer to: "flushing menu"
	ModePrint	To set the operation of the mode print. Refer to: "Mode print menu"
Utility (1/2 to 2/2)	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.4.2 Error Display menu

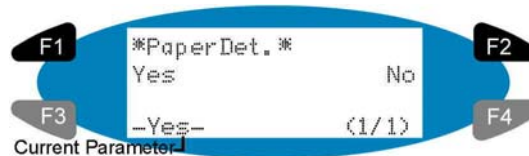
Sets display method to the operation panel when minor error occurred.



Setup items	Parameters	Descriptions
Error Disp.	<OFF>	No Error Display.
	ON	To perform Error Display.
	–	After setting, shift to the previous hierarchy menu. Refer to: "Utility menu"

6.5.4.3 Media detection menu

When media is initialized, sets whether to perform detection of width and edge of the media.



Setup items	Parameters	Descriptions
Paper Det.	<Yes>	To perform media detection automatically. After setting, shift to the previous hierarchy menu. Refer to: "Utility menu"
	No	Winding is not performed. When "OFF" is set, go to the Media width setup menu. Refer to: "Media width menu"
	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Utility menu"

⚠ Notes ⚠

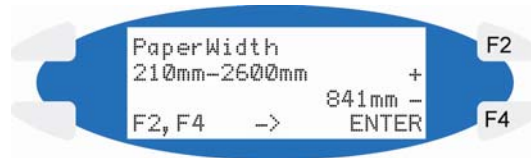
- When setup value is changed from "OFF" to "ON" in the media detection menu, go to the media initial menu.
Refer to: "Setting media type"

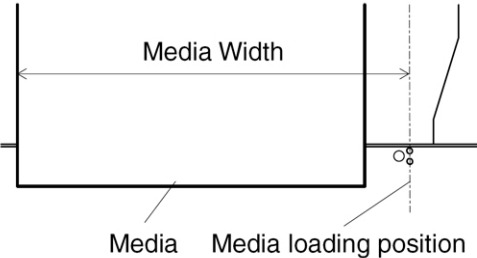
6.5.4.4 Media width menu

When media detection is not performed during media initialization, the distance between the media loading position and the left edge of media (paper width) is set here.

⚠ Notes ⚠

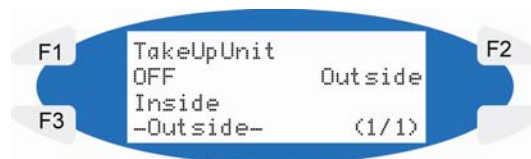
- If the set value is larger than the media width set by the media width menu, media and product may be tainted by ink during printing.



Setup items	Parameters	Descriptions
	210mm to <841mm> to 2600mm	<p>To change media width by operating the following keys.</p> <ul style="list-style-type: none"> [F2] key: Increases setup value. [F4] key: Decreases setup value. [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. <p>Refer to: "Utility menu"</p> 

6.5.4.5 Winding unit menu

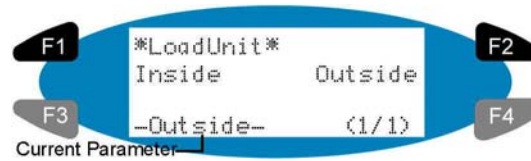
Sets Winding unit operation during printing.



Setup items	Parameters	Descriptions
Take Up Unit	<OFF>	No use of winding unit.
	Outside	Sets in outer winding.
	Inside	Sets in inner winding.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Utility menu"

6.5.4.6 Feed unit menu

Sets the operation of the feeding unit.



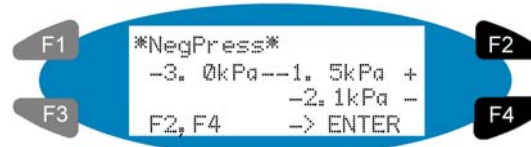
Setup items	Parameters	Descriptions
Load Unit	Inside	Set when using roll media with the printable side inside.
	<Outside>	Set when using roll media with the printable side outside.
	–	After setting, shift to the previous hierarchy menu. Refer to: “Utility menu”

6.5.4.7 Negative pressure pump menu

The operational pressure of the vacuum pump is set here.

⚠ Notes ⚠

- Adjust the working pressure of the negative pressure pump when:
 - Printing becomes smeared or misprinted and cannot be corrected by performing head cleaning: increase the parameter
- Ink drips from the print head face during ink replenishment: decrease the parameter “Text normal”.



Setup items	Parameters	Descriptions
Neg Press	-3.0kPa to <2.1kPa> to -1.5kPa	Change the operating pressure of negative pressure pump by operating the following keys. <ul style="list-style-type: none"> [F2] key: Increases setup value. [F4] key: Decreases setup value. [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. Refer to: “Utility menu”

6.5.4.8 Slant check menu

Set to detect a slant while feeding media.

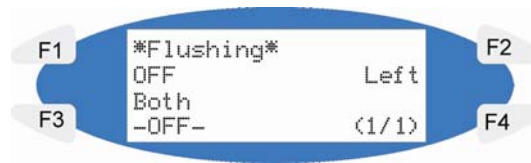


Setup items	Parameters	Descriptions
Paper slant	OFF	No slant check.
	<ON>	To perform check.
	–	[CANCEL] key: Shift to the previous hierarchy menu. Refer to: “Utility menu”

6.5.4.9 Flushing menu

Sets the flushing operation.

When making data with long width print, and missing dots are evident.



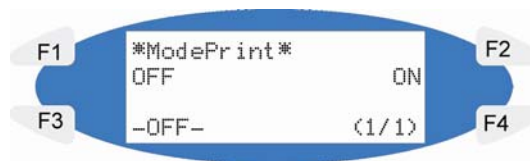
Setup items	Parameters	Descriptions
Flushing	<OFF>	Flushing is not performed.
	ON	To perform Flushing. When "ON" is set, go to the Shot Count menu.
	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Utility menu"

6.5.4.10 Mode Print

Make this setting when you draw present printing condition after online printing.

Drawn printing conditions are as follows.

- Condition
- Interlace
- Priority
- Direction



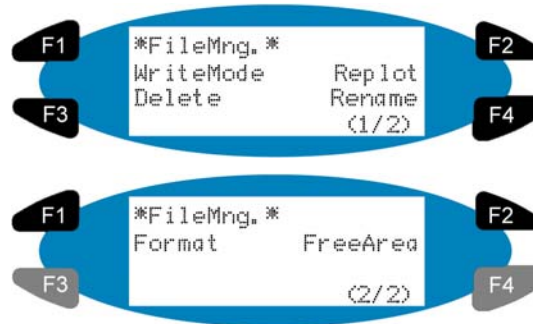
Setup items	Parameters	Descriptions
Mode print	<OFF>	No printing condition printing.
	ON	To perform condition printing.
	–	[CANCEL]-key: Shifts to the previous hierarchy menu. Refer to: "Utility menu"

6.5.4.11 File management setup menu

Makes various settings for the processing method of the printing data sent from a computer to the installed hard disk in the printer.

⚠ Notes ⚠

- The items on the File Management menu are displayed if a hard disk has been installed on the product.
- To format the hard disk when installing the hard disk of another product.



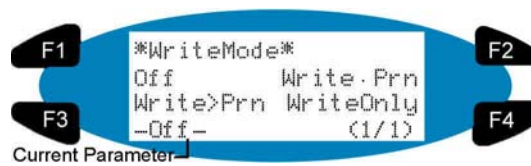
Setup items	Parameters	Descriptions
File Mng.(1/2)	Write Mode	To set writing method of printing data to the hard disk and printing method. Refer to: "Write mode menu"
	Re-print	To set this when you want to draw the printing data saved in the hard disk. Refer to: "Reprint menu"
	Delete	To set this when you delete printing data saved in the hard disk. Refer to: "File delete menu"
	Rename	To change file name for printing data saved in the hard disk. Refer to: "Re-name menu "
File Mng.(2/2)	Format	To perform formatting of the hard disk. Refer to: "Format menu"
	Free Area	Displays the current condition of the hard disk. Refer to: "Free area menu"
File Mng. (1/2 to 2/2)	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.4.12 Write mode menu

Sets the writing method of the printing data.

Notes

- Write mode menu is displayed if a hard disk has been installed on the product.
- When writing printing data to the hard disk,
 - Be sure to set the media in the tray.
Refer to: "Media handling"
 - To change the printing start position, perform origin setup.
Refer to: "Origin setup menu"
 - Printing data is processed according to the size of the set media and the printing start position.
- If there is no media set in the tray, the printing data cannot be written.



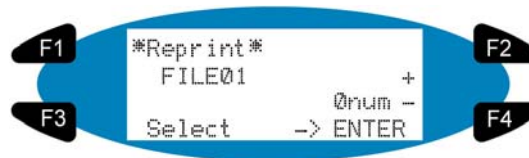
6.5.4.13 Reprint menu


Sets following items when you want to draw printing data saved in the hard disk.

- File name
- Printing media number

⚠ Notes ⚠

- Reprint menu is displayed if a hard disk is installed in the product.
- When reprinting the printing data,
 - Use media of the same size as when writing printing data.
The size of the printing data will be the same as the initial paper size, even if paper of a different size has been set, and the printing will start from the same printing start position.
 - Use a cartridge with the same colour and type of ink that will be used during the printing data write.
If an ink cartridge with differing colours or type is used, it will not print correctly.



Setup items	Parameters	Descriptions
Re-print	File name	<ul style="list-style-type: none"> • [F1] key: To select the file name with back feed way. • [F3] key: To select the file name with forward feed way. To select the file name to be printed by operating the following keys.
	Number: 0 to 99	To change the printing media number by operating the following keys. <ul style="list-style-type: none"> • [F2] key: Increases setup value. • [F4] key: Decreases setup value.
	—	<ul style="list-style-type: none"> • [ENTER] key: To confirm setup value. <ul style="list-style-type: none"> ○ Product starts printing. ○ After printing, shifts to normal condition.  <ul style="list-style-type: none"> ○ The unit enters the normal status • [CANCEL]-key: To cancel setup value, shifts to the previous hierarchy menu. Refer to: "File management setup menu"

6.5.4.14 File delete menu

To set when you delete printing data saved in the hard disk.

Notes

- File delete menu can be set when hard disks have been installed.
- If you delete file by the File delete menu, you cannot retrieve that file again. If you want to use the deleted file again, send the printing data to the hard disk of the product from the computer again.



Setup items	Parameters	Descriptions
Delete	File name	<p>Select to-be-deleted file name by operating the following keys.</p> <ul style="list-style-type: none"> • [F1] key: To select file name with back feed way. • [F3] key: To select file name with forward feed way. • [ENTER] key: To delete selected file, shifts to the previous hierarchy menu. • [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. <p>Refer to: "File management setup menu"</p>

6.5.4.15 Re-name menu

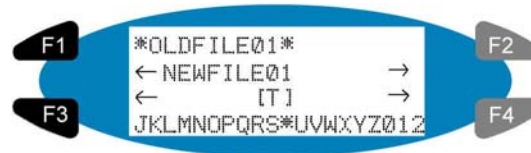
To change file name for printing data saved in the hard disk.

⚠ Notes ⚠

- Re-name menu can be set when hard disks have been installed.



Setup items	Parameters	Descriptions
Rename	File name	<p>To select the to-be-changed file name by operating the following keys.</p> <ul style="list-style-type: none"> [F1] key: To select file name with back feed way. [F3] key: To select file name with forward feed way. [ENTER] key: To confirm setup value. The following messages are displayed on the operation panel. [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. <p>Refer to: "File management setup menu"</p>



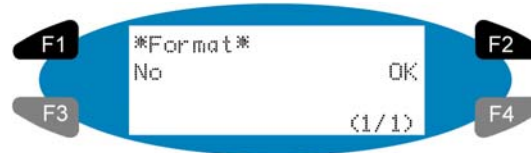
Setup items	Parameters	Descriptions
To-be-changed file name	Characters you want to change	<p>Select characters you want to change by operating the following keys.</p> <ul style="list-style-type: none"> [F1] key: To select characters you want to change with back feed way. [F3] key: To select characters you want to change with forward feed way.
	Characters you can use: A-Z or 0-9	<p>Select the to-be-changed characters by operating the following keys.</p> <ul style="list-style-type: none"> [F2] key: Selects the to-be-changed characters with back feed way. [F4] key: Selects the to-be-changed characters with forward feed way.
	–	<ul style="list-style-type: none"> [ENTER] key: To confirm setup value, shifts to the previous hierarchy menu. [CANCEL] key: To cancel setup value, shifts to the previous hierarchy menu. <p>Refer to: "File management setup menu"</p>

6.5.4.16 Format menu

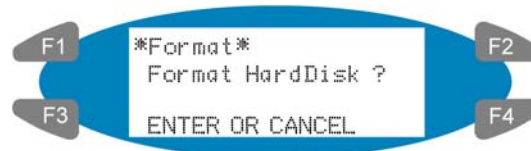
To format the hard disk.


⚠ Notes ⚠

- Format menu can be set when hard disks are installed.
- If formatting of the hard disk has been performed, all data saved in the hard disk will be deleted.



Setup items	Parameters	Descriptions
Format	No	Format is not performed.
	–	[CANCEL] key: To cancel the setup value, shifts to the previous hierarchy menu.
	OK	Perform formatting.



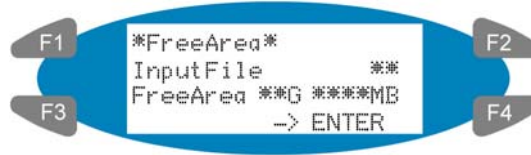
Setup items	Parameters	Descriptions
Format	Format will be performed. OK?	<ul style="list-style-type: none"> • [ENTER] key: • Product starts formatting. • The following messages are displayed on the operation panel. 
		<ul style="list-style-type: none"> • After formatting, shifts to the previous hierarchy menu. Refer to: "File management setup menu" • [CANCEL] key: • Formatting will not be performed. • Shifts to the previous hierarchy menu. Refer to: "File management setup menu"

6.5.4.17 Free area menu

Displays the current condition of the hard disk.

⚠ Notes ⚠

- Free area menu can be set when the hard disk have been installed



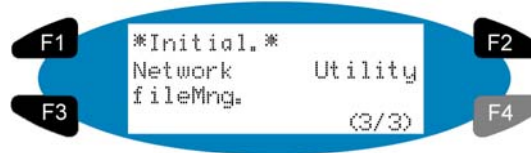
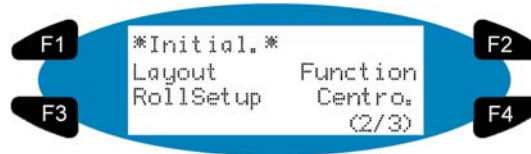
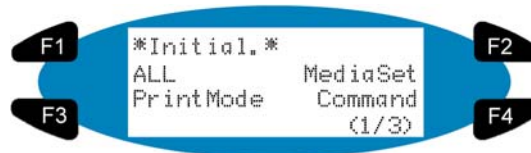
Setup items	Parameters	Descriptions
Free Area	<ul style="list-style-type: none"> Input File Free Area 	<p>The following items regarding the current status of the hard disk is displayed.</p> <ul style="list-style-type: none"> Input File: Displays the number of print data saved on the Hard disk. Free Area: Shows the remaining space in the hard disk. [ENTER] key: Shifts to the previous hierarchy menu. Refer to: "File management setup menu"

6.5.4.18 Initialize setup menu

Returns parameters to the factory setting.

⚠ Notes ⚠

- Network initialize menu is displayed when the network interface board has been installed.
- File management initialize menu is displayed when the hard disk has been installed.



Setup items	Parameters	Descriptions
Initialize (1/3)	All	Returns all parameters to the factory setting. Refer to: "Setup menu"
	Media Set	Returns parameters in the media setup menu to the factory setting. Refer to: "Media setup Initialize menu"
	Print Mode	Returns parameters in the print mode menu to the factory setting. Refer to: "Printing mode initialize menu"
	Command	Returns parameters in the command setup menu to the factory setting. Refer to: "Command setup Initialize menu"
Initialize (2/3)	Layout	Returns parameters in the layout setup menu to the factory setting. Refer to: "Layout setup Initialize menu"
	Function	Returns parameters in the function setup menu to the factory setting. Refer to: "Function setup Initialize menu"
	Roll Setup	Returns parameters in the roll media setup menu to the factory setting. Refer to: "Roll media setup Initialize menu"
	Centro.	Returns parameters in the Centronics setup menu to the factory setting. Refer to: "Centronics Initialize menu"
Initialize (3/3)	Network	Returns parameters in the network setup menu to the factory setting. Refer to: "Network Initialize menu"
	Utility	Returns parameters in the utility setup menu to the factory setting. Refer to: "Utility Initialize menu"
	File Mng.	The file management setup menu values are reset to factory default settings. Refer to: "File management Initialize menu"
Initialize (1/3 to 3/3)	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.4.19 All Initialize menu

All values are set to the setup value (initial value) at the factory shipping.



Setup items	Parameters	Descriptions
All	No	No initialization.
	OK	To perform initialization.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Initialize setup menu"

6.5.4.20 Media setup Initialize menu

Setup of Media setup menu are set to the setup value (initial value) at the factory shipping.



Setup items	Parameters	Descriptions
Media Set	No	No initialization.
	OK	To perform initialization.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Initialize setup menu"

6.5.4.21 Printing mode initialize menu

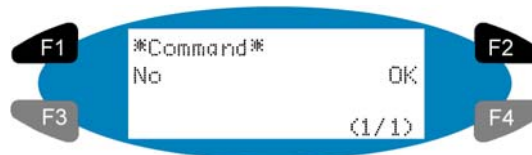
Setup of printing mode menu are set to the setup value (initial value) at the factory shipping.



Setup items	Parameters	Descriptions
Printing Mode	No	No initialization.
	OK	To perform initialization.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Initialize setup menu"

6.5.4.22 Command setup Initialize menu

Setup values of Command Setup menu are set to the setup value (initial value) at the factory shipping.



Setup items	Parameters	Descriptions
Command	No	No initialization.
	OK	To perform initialization.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Initialize setup menu"

6.5.4.23 Layout setup Initialize menu

Values of the Layout setup menu are set to the setup value (initial value) at the factory shipping.



Setup items	Parameters	Descriptions
Layout	No	No initialization.
	OK	To perform initialization.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Initialize setup menu"

6.5.4.24 Function setup Initialize menu

Values of the function setup menu are set to the setup value (initial value) at the factory shipping.



Setup items	Parameters	Descriptions
Function	No	No initialization.
	OK	To perform initialization.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Initialize setup menu"

6.5.4.25 Roll media setup Initialize menu

Values of the roll Media setup menu are set to the setup value (initial value) at the factory shipping.



Setup items	Parameters	Descriptions
Roll Setup	No	No initialization.
	OK	To perform initialization.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Initialize setup menu"

6.5.4.26 Centronics Initialize menu

Values of the Centronics menu are set to the setup value (initial value) at the factory shipping.



Setup items	Parameters	Descriptions
Centro.	No	No initialization.
	OK	To perform initialization.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Initialize setup menu"

6.5.4.27 Network Initialize menu

Values of the Network menu are set to the setup value (initial value) at the factory shipping.

⚠ Notes ⚠

- Network initialize menu is displayed when the network interface board has been installed.



Setup items	Parameters	Descriptions
Network	No	No initialization.
	OK	To perform initialization.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Initialize setup menu"

6.5.4.28 Utility Initialize menu

Values of the Utility menu are set to the setup value (initial value) at the factory shipping.



Setup items	Parameters	Descriptions
Utility	No	No initialization.
	OK	To perform initialization.
	–	After settings, shifts to the previous hierarchy menu. Refer to: "Initialize setup menu"

6.5.4.29 File management Initialize menu

Values of the File management menu are set to the setup value (initial value) at the factory shipping.

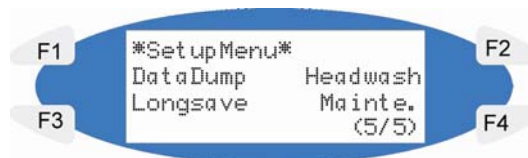
⚠ Notes ⚠

- File management initialize menu is displayed when the hard disk has been installed.



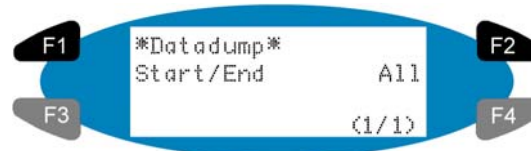
Setup items	Parameters	Descriptions
File Mng.	NO	No initialization.
	OK	To perform initialization.
	–	After setting, shifts to the previous hierarchy menu. Refer to: "Initialize setup menu"

6.5.5 Setup menu 5/5



6.5.5.1 Data dump menu

To perform dump printing for online function check.



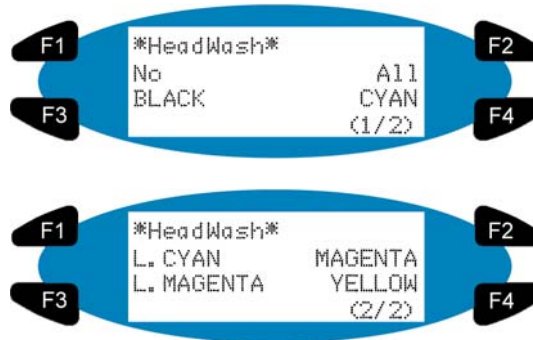
Setup items	Parameters	Descriptions
Data Dump	Start / End	<div> ⚠ Notes ⚠ <ul style="list-style-type: none"> Damp printing is used by service person to check the functions of the printer. Do not use this function for normal printing. </div>
	All	
	–	
		After setting, shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.5.2 Head wash menu

To perform process for washing print head.

⚠ Notes ⚠

- Refer to "Washing print head" for more details.



Setup items	Parameters	Descriptions
Head Wash (1/2)	No	Does not perform washing print head. Shifts to the previous hierarchy menu. Refer to: "Setup menu"
	All	Washing print head is performed individually for each colour in order.
	Black	Washing print head is performed for the selected print head colour.
	Cyan	
Head Wash (2/2)	Light Cyan	
	Magenta	
	Light Magenta	
	Yellow	
Head Wash (1/2 to 2/2)	–	After setting, shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.5.3 Long-term storage cleaning menu

To perform process for Long-term storage cleaning.

⚠ Notes ⚠

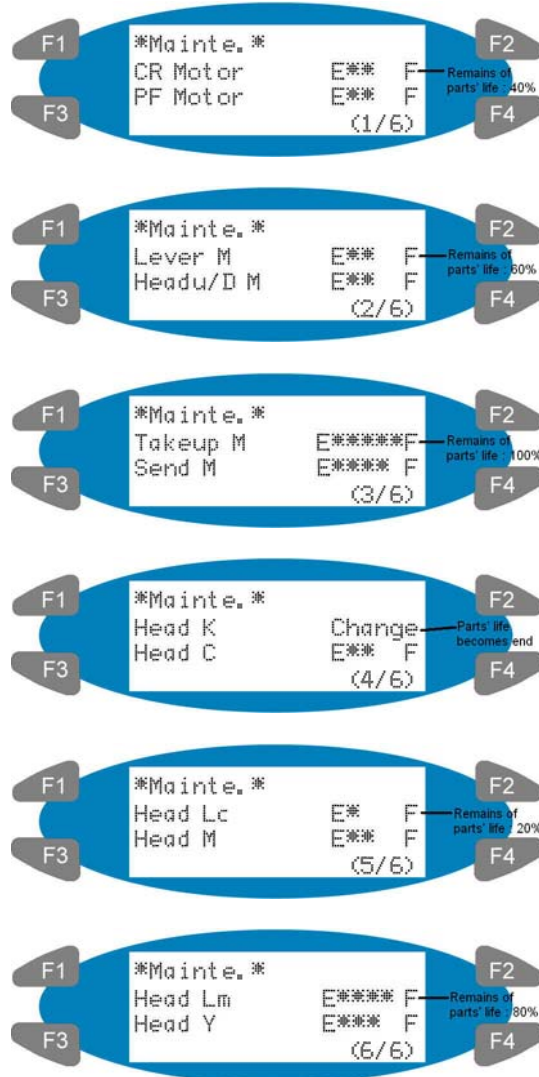
- For operation procedures for Long-term storage cleaning, refer to "Long-term storage cleaning".



Setup items	Parameters	Descriptions
Long Save (1/2)	No	Does not perform the cleaning for long-term storage. To shift to the previous hierarchy menu. Refer to: "Setup menu"
	All	Cleaning for long-term storage is performed individually for each colour in order.
	Black	Cleaning for long-term storage is performed for the selected print head colour.
	Cyan	
Long Save (2/2)	Light Cyan	
	Magenta	
	Light Magenta	
	Yellow	
Long Save (1/2 to 2/2)	–	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

6.5.5.4 Maintenance status menu

Check the parts' life cycle of the product.



Setup items	Parameters	Descriptions
Mainte. (1/6 to 6/6)	Life cycle: E*****F	<p>Displays the life cycles of the following parts of the product.</p> <ul style="list-style-type: none"> • CR motor • PF motor • Lever motor • Head U/D motor • Winding unit motor • Media feed motor • Print head K • Print head C • Print head Lc • Print head M • Print head Lm • Print head Y <p>Part's life cycle is shown be the amount of * Mark (max. 5: remain 100%).</p> <p>When a part's life cycle comes to an end, the * mark reduces one (each 20%).</p> <p>If the * mark is reduced, the life cycle of the part comes to an end.</p> <p>Replace the parts that have reached their usable life</p> <p>According to "Replacement of the print head and CR motor".</p>
	—	[CANCEL] key: Shifts to the previous hierarchy menu. Refer to: "Setup menu"

⚠ Notes ⚠

- The user will be charged for replacement of a part that has reached its usable life span even during the free warranty period or covered by maintenance contract.
- If parts that have reached their usable life span continue to be used without replacing them, and troubles arise, they will not be guaranteed.

6.5.5.5 Mode print menu

Make this setting when you draw present printing condition after online printing.

Drawn printing conditions are as follows.

- Condition
- Interlace
- Priority
- Direction



Setup items	Parameters	Descriptions
Mode print	<OFF>	No printing condition printing.
	ON	To perform condition printing.
	—	[CANCEL]-key: Shifts to the previous hierarchy menu. Refer to: "Utility menu"

7 TROUBLESHOOTING

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7.1 INTRODUCTION

Be sure to read and understand the safety warnings before handling the printer.

This chapter explains troubles that may occur when using the printer and how to solve them.
If you encounter an error not described in this chapter, refer to "Error messages" and contact your local MUTOH dealer.

Notes

- To receive our customer support service, present your warranty. If you do not present it, you may be charged for the service even if it is within the term of warranty.
- If you have a maintenance service contract, show the agreement or other documents.

7.2 FAILURES AND MALFUNCTIONS OF THE PRINTER

This section describes the failures and malfunctions of the printer not displayed as errors, and their causes and solutions.

(1) The printer does not work after the power is switched ON.

No.	Possible cause	Solutions	References
1	You did not plug the power cable in.	Plug in the power cable.	"Connecting the power cable"
2	The AC power does not match the specified voltage.	Use the printer at the specified voltage.	"Connecting the power cable"
3	Is the front cover open?	Close the front cover.	"Media handling"
4	Is the maintenance cover open?	Close the maintenance cover.	"Switching the power ON/OFF"

(2) The printer does not work after the media is loaded.

No.	Possible cause	Solutions	References
1	Close the maintenance cover.	Close the front cover.	"Media handling"
2	Is the pressure roller raised?	Lower the pressure roller.	"Media handling"
3	Is the maintenance cover open?	Close the maintenance cover.	"Switching the power ON/OFF"
4	You did not load the media straight into the printer.	Load the media straight into the printer.	"Media handling"
5	Are all main tanks filled with ink?	Fill all ink tanks with ink.	"Filling the ink - jet wash fluid"
6	Is the recommended media being used?	Use a recommended media.	"Media type"
7	You used the printer in direct sunlight or other locations not appropriate for the specified environment.	Use the printer in the specified environment.	"Product Specifications"

(3) The printer does not work after data is sent from a computer.

No.	Possible cause	Solutions	References
1	You did not connect the interface cable.	Connect the Centronics interface cable.	"Centronics interface connection"
2	Are all tanks filled with ink?	Fill all ink tanks with ink.	"Filling the ink - jet wash fluid"

(4) The printer does not print and an error is generated after data is sent from a computer.

No.	Possible cause	Solutions	References
1	Does the settings of the computer and the printer match?	Insure that the computer and printer setting match.	"Connecting the printer to your PC"
2	The interface setting or command mode on a computer and the printer do not match.		

(5) Printouts are partially blurred or missing.

Notes

- When using a media other than those recommended, a proper printing quality may not be gained.

No.	Possible cause	Solutions	References
1	The media is damp.	Replace with new media.	"Replacing roll media"
2	You used folded, creased, or curled media.		

(6) Printing position is not correct (some position is not printed.)

No.	Possible cause	Solutions	References
1	The loading position of the media is not correct.	Load the media correctly.	"Loading roll media"
2	Has the mirror been set?	Disable the setting for the mirror, or make the setting again.	"Menu setup on the operation panel"
3	You set the origin or starting position.	Switch OFF the origin or starting position setting, or make the setting again.	"Setup on the operation panel"

(7) Media jams occur frequently.

Notes

- A proper media feed cannot be guaranteed for media that are not in the recommendation.

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	"Media type"
2	You used the printer in an environment other than that specified.	Use the printer in the specified environment.	"Cautions on handling media"
3	You used old media.	Replace with new media.	"Replacing roll media"
4	You used folded, creased, or curled media.		

(8) Roll media cannot be cut correctly.

No.	Possible cause	Solutions	References
1	The edge of the cutting blade is not sharp.	Replace the cutting blade.	–
2	The roll media has static electricity.	Remove the static electricity on the roll media.	–

(9) You cannot perform initial ink charging.

No.	Possible cause	Solutions	References
1	Is the front cover open?	Close the front cover.	"Media handling"
2	Is the pressure roller raised?	Lower the pressure roller.	"Media handling"
3	Is the maintenance cover open?	Close the maintenance cover.	"Switching the power ON/OFF"
4	Are all main tanks filled with ink?	Fill all ink tanks with ink.	"Filling the ink - jet wash fluid"

(10) Ink is not used though you performed initial ink charge.

No.	Possible cause	Solutions	References
1	Is the ink frozen?	Leave in room temperature for at least 3 hours, and perform head-cleaning a few times.	"Head cleaning"
2	You switched OFF the printer during the initial ink charging.	Switch ON the printer to continue the initial ink charging.	"Filling the ink - jet wash fluid"
3	The printer rarely prints correctly just after initial ink charging.	Perform head cleaning a few times, and check after each cleaning.	"Head cleaning"

(11) The media is off or damaged when loading it.

Notes

- Remove the jammed or damaged media, see "When media jams occur".

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	"Media type"
2	The loading position of the media is not correct.	Load the media correctly.	"Loading roll media"
3	Foreign material, such as piece of media, is attached to the pressure roller.	Clean the pressure roller.	"Cleaning inside the printer"
4	You used the printer in direct sunlight or other locations not appropriate for the specified environment.	Use the printer in the specified environment.	"Product Specifications"
5	You used media folded, creased, damaged, tore, curled, or inclined to be curled.	Replace the media.	"Cautions on handling media"

(12) Media is damaged during media Initial.

Notes

- Remove the jammed or damaged media, see "When media jams occur".

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	"Media type"
2	The loading position of the media is not correct.	Load the media correctly.	"Loading roll media"
3	You did not load the media straight into the printer.	Load the media straight into the printer.	"Loading roll media"
4	Foreign material, such as piece of media, is attached to the pressure roller.	Clean the pressure roller.	"Cleaning inside the printer"
5	You used the printer where air from an air conditioner blows or other location not appropriate for the specified environment.	Use the printer in the specified environment.	"Product Specifications"
6	You used folded, creased, damaged, tore, curled, or inclined to be curled media.	Replace the media.	"Cautions on handling media"

(13) Cannot detect the media

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	"Media type"
2	You used the printer in direct sunlight or other locations not appropriate for the specified environment.	Use the printer in the specified environment.	"Product" Specifications
3	The loading position of the media is not correct.	Load the media correctly.	"Loading roll media"

(14) Media size is wrong during media Initial.

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	"Media type"
2	You did not load the media straight into the printer.	Load the media straight into the printer.	"Media handling"
3	The curled surface of media is up when loading.	Remove the curl in the media, or replace with new media.	"Media handling"
4	You used the printer where air from an air conditioner blows or other location not appropriate for the specified environment	Use the printer in the specified environment.	"Product Specifications"
5	You reused printed media.	Use new, not printed media.	"Media type"

(15) Media is fed crooked while printing.

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	"Media type"
2	The loading position of the media is not correct.	Load the media correctly.	"Loading roll media"

(16) The printer is not connected to a computer using the Centronics interface.

No.	Possible cause	Solutions	References
1	You did not connect the Centronics interface cable correctly.	Connect the Centronics interface cable correctly.	"Centronics interface connection"
2	When sending printing data from the computer, does the data lamp of the control panel light?	If the DATA lamp does not light, contact the computer manufacturer.	–
3	The Centronics setting on the printer does not match the setting on the computer.	Make the Centronics setting on the printer so that it matches the setting on the computer.	"System requirements"

(17) The printer is not connected to a computer using LAN interface.

No.	Possible cause	Solutions	References
1	You did not connect the LAN cable correctly.	Connect the LAN cable correctly.	"Centronics interface connection"
2	The network setting is not correct.	Set the network correctly.	"Network setup menu"
3	The network setting on the printer does not match the setting on the computer.	Make the network setting on the printer so that it matches the setting on the computer.	"System requirements"
4	The DATA lamp on the operation panel does not light when printing data is sent from computer.	If the DATA lamp does not light, contact to the computer manufacturer.	–

(18) The printed lines are blurry.

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	"Media type"
2	You used too thick or thin media.	Use a recommended media.	"Media type"
3	The printed surface is not the printable side.	Pay attention to the printable side to load media correctly.	"Media handling"
4	Did you try cleaning the head?	Perform head cleaning. Perform cleaning on the "Powerful" setting.	"Head cleaning"
		Clean the print head surface.	"Cleaning of the print head surface"
		Perform cleaning for long-term storage.	"Long-term storage cleaning"

(19) White or black lines appear on printouts.

No.	Possible cause	Solutions	References
1	Is the recommended media being used?	Use a recommended media.	"Media type"
2	Did you perform media feed compensation?	Perform media feed compensation.	"Media feed compensation"

(20) Lines are missing on printouts.

No.	Possible cause	Solutions	References
1	Was the ink that was used for refill within its date of expiration?	Use new ink.	" Refilling the ink and jet wash fluid"
2	Is the recommended media being used?	Use a recommended media.	"Media type"
3	Did you try minor adjustments for image quality?	Try minor adjustments for image quality.	"Alignment"

7.3 ERROR MESSAGES

Be sure to read and understand the safety warnings before handling the printer.

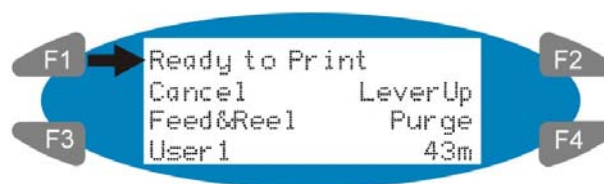
This chapter explains the messages displayed on the operation panel both when the printer works normally and when an error occurs, and the solutions for the errors.

7.3.1 Status messages

The following are the status messages while the printer works normally.

(1) Displays of the operational status

The following operational status is displayed on the first line on the operation panel.



No.	Message	Solutions	References
1	Ready to print	Waiting for the next operation. (The media is loaded.)	–
2	Paper End	The printer is waiting for the next operation. (No media is loaded into the printer.)	“Media handling”
3	Receiving	The printer is receiving data.	–
4	Converting	The printer is converting data.	–
5	Printing	The printer is printing.	–
6	Data Writing	The printer is writing data to the hard disk.	–
7	Waste Ink Tank Full	Replace the waste liquid absorption material in the tank.	“Disposal of waste fluids”
8	No Jetwash	Refill the jet wash fluid.	“Refilling the ink and jet wash fluid”
9	Moving Origin Pos	The Print head is returning to the origin position of the origin setting process.	See “Origin setup menu”
10	WarmingUp P: **%D:**%	The platen heater / ink drier is warming up. The thermal state of P (platen heater) and D (ink drier) is displayed. (** displays a thermal state by 00-99. When it reaches 100%, it is displayed as “OK”.)	-

(2) Displays of the operational status

The following operational status is displayed between the first and the third line on the operation panel.



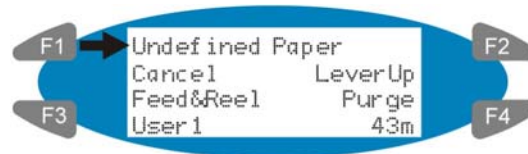
No.	Message	Solutions	References
1	Filling Ink Wait for a while	The printer performs ink charging. Please wait.	"Filling the ink - jet wash fluid"
2	Purging Wait for a while	The printer performs head cleaning. Please wait.	"Head cleaning before printing"
3	Initializing Paper *****	The printer performs initial setting of media. Please wait. (***** indicates the media type setting mode.)	"Setting media type"
4	Warming up Wait for a while	The platen heater /ink drier is warming up. Please wait.	—
5	Washing Head Wait for a while	The print head is being cleaned for the cleaning process of the long-term storage. Please wait.	"Long-term storage cleaning"
6	*Capping Out* Remove Head Cap on and press ENTER	The print head cap is attached. Remove the print head cap, and press the [ENTER] key.	"Long-term storage cleaning" "Switching the power ON/OFF"
7	*Manual Cut Paper* Cut paper and press ENTER	Cut the roll media, and press the [ENTER] key of the control panel.	"Roll media cutting procedure"
8	*Roller Turn* Take up Roll -OFF- can not operate	The winding unit is set to "OFF". Set to "ON" on the winding unit menu.	"Menu setup on the operation panel"
9	Discharging JW	The jet wash fluid is being discharged the jet wash fluid for the cleaning process of the log-term storage or washing print head.	"Washing print head" "Long-term storage cleaning"
10	Injecting Jetwash	The jet wash fluid is being injected the jet wash fluid for the cleaning process of the log-term storage or washing print head.	"Washing print head" "Long-term storage cleaning"
11	Power OFF	The ink is being discharged into the print head cap for the power OFF process.	"Switching the power OFF"
12	*Cap Cover Set* Put Cap Cover on and press ENTER	Install the print head cap, and press the [ENTER] key.	"Switching the power OFF"
13	*Origin Pos. Check* Confirm Position and press ENTER	Waits to determine the setup values of the origin setup menu. Press [ENTER] key on the operation panel.	"Origin setup menu"
14	*Check Maintenance* Motor [CR PF LV UD] Motor [Takeup Send] Head [KCcMmY]	There is the part that becomes end of the life cycle. <ul style="list-style-type: none"> • Check the maintenance record menu. • Exchange the parts shown in the maintenance record. 	"Switching the power ON" See "Replacement of the print head and CR motor"
15	*Purge End* Print -> CANCEL Purge -> ENTER.	The Purge process during printing is completed. Press the following keys on the operation panel: <ul style="list-style-type: none"> • When restart printing: [CANCEL] key • When continue purging: [ENTER] key 	"Head cleaning before printing"

7.3.2 Message type error display and solutions

The following message type errors are displayed when an error occurs while operating the printer. When one of the following message type error displays appears, the printer may stop operation. If the printer stops operation, solve the problem to delete the error message and restart the printer.

(1) Error messages regarding media feeding

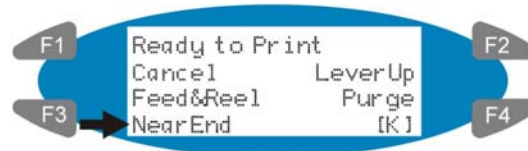
The following error message is displayed on the first line on the operation panel.



No.	Message	Descriptions	Solutions	References
1	Undefined paper	The printer failed to detect the media. (The printer stops.)	Reload the media.	"Media handling"
2	Paper Slant	The media was fed at an angle into the printer. (The printer stops.)	Reload the media.	"Media handling"
3	End Of Roll	Roll media runs out. (The printer stops.)	Load new roll media.	"Replacing roll media"
4	Cover Open	The front cover is open. (The printer stops.)	Close the front cover.	–
5	Please Set Paper	The pressure roller is raised. There is no media.	Set the media, and lower the pressure roller.	–
6	Paper JAM Error	The media has jammed. (The printer stops.)	Remove the jammed media, and reset a media.	"Menu setup on the operation panel"

(2) Error messages regarding warnings of the remaining ink

The following error message is displayed on the forth line on the operation panel.



No.	Message	Descriptions	Solutions	References
1	Near End [*]	The amount left in the main tank becomes low. (The printer does not stop.)	Prepare new ink for refilling.	"Refilling the ink and jet wash fluid"
2	No Jetwash	The jetwash fluid inside the main tank is run out. (The printer does not stop.)	Refill the new jet wash fluid immediately.	"Refilling the ink and jet wash fluid"

Notes

- The [*] of the error will display shows the colour of the ink causing the error according to the following codes:
 - K: Black
 - C: Cyan
 - c: Light Cyan
 - M: Magenta
 - m: Light Magenta
 - Y: Yellow

(3) Other error messages

The following error message is displayed on the operation panel.



No.	Message	Descriptions	Solutions	References
1	Ink Status No Ink [*]	The ink inside the main tank is run out. (The printer stops.)	Replace the ink cartridge(s)	"Refilling the ink and jet wash fluid"
2	Ink Status Not Filled [*]	Initial filling has not been performed.	Perform initial filling of the ink.	"Filling the ink - jet wash fluid"
3	Memory Status No Memory DIMM 64 MB	Short of memory while converting or printing data.	Contact your local MUTOH dealer.	—

⚠ Notes ⚠

- The [*] of the error will display shows the colour of the ink causing the error according to the following codes:
 - K: Black
 - C: Cyan
 - c: Light Cyan
 - M: Magenta
 - m: Light Magenta
 - Y: Yellow

7.3.3 Data error display and solutions

Following are data error displays and their solutions during printer operations.

Data errors are displayed when a communication error occurs between the computer and the printer.

If data error display occurs, the following error messages are displayed and the printer stops.

Solve the problem to delete the error message and restart the printer.



No.	Message	Descriptions	Solutions	References
1	Online Status **** Err []	An error has occurred while receiving data.	Confirm the communication condition between the computer and the printer.	"Menu setup on the operation panel"

⚠ Notes ⚠

- *** In error messages are code numbers indicating what kind of error occurred.

7.3.4 Command error display and solutions

Following are command error descriptions and their solutions during the printer operations.

Command errors are displayed when an error has occurred while converting the command data sent from a computer to the printer.

If a command error occurs, the following error messages are displayed and the printer stops.

Solve the problem to delete the error message and restart the printer.



No.	Message	Descriptions	Solutions	References
1	Command Status MH**** Err []	Invalid command data is sent from a computer.	Make sure that the settings of the computer and the printer match.	“Menu setup on the operation panel”

⚠ Notes ⚠

- *** In error messages are code numbers indicating what kind of error occurred.
- [] may indicate the command code of the error.
- For the settings on a computer, refer to the computer's operation manual.

7.3.5 Error requiring a restart

Error requiring a restart is displayed when the following fatal error has occurred during printer operation.

- Foreign material disturbing the printer operation is involved in the printer.
- An electrical circuit (such as board, motor, or sensor) failure has occurred.
- An error on control program of the printer has occurred.

If an error requiring a restart has occurred, the printer works as shown below then stops.

Step 1 : Power relating to the driving system is shut down automatically.

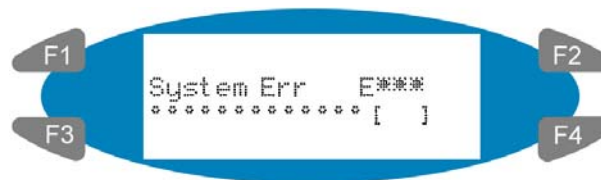
Step 2 : All indicator lights on the operation panel are switched ON and beeps sound continuously.

Step 3 : An error message is displayed on the operation panel.

Press any key on the operation panel to stop the beep sounds.

If error requiring a restart has occurred, solve the problems to restart the printer and delete the error.

If the same error message is displayed again, contact your local MUTOH dealer. Be sure to inquire by the code numbers of the error messages.



No.	Message	Descriptions	Solutions	References
1	System Err ****Err []	An error which cannot be solved promptly has occurred.	<ol style="list-style-type: none"> 1. If foreign materials such as a piece of media or media dust are involved in the driving system, remove them. 2. Make sure that the replaced parts are installed correctly. 3. Switch OFF the printer. After 10 seconds or more have passed, switch the printer back ON. 	<p>"When media jams occur"</p> <p>"Replacing consumables"</p>

⚠ Notes ⚠

- *** In error messages are code numbers indicating what kind of error occurred.
- [] may indicate the command code of the error.
- For the settings on a computer, refer to the computer's operation manual.

7.4 WHEN MEDIA JAMS OCCUR

Be sure to read and understand the safety warnings before handling the printer.

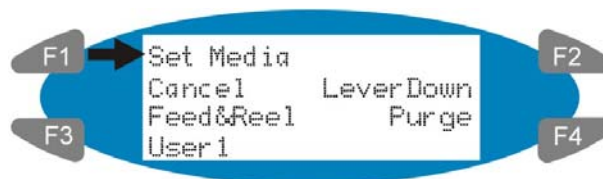
If the loaded media has been jammed in the printer, follow the steps below to remove the jammed media.

7.4.1 How to remove the media

Step 1 Restart the printer. Switch OFF the power supply of the product and switch ON again.

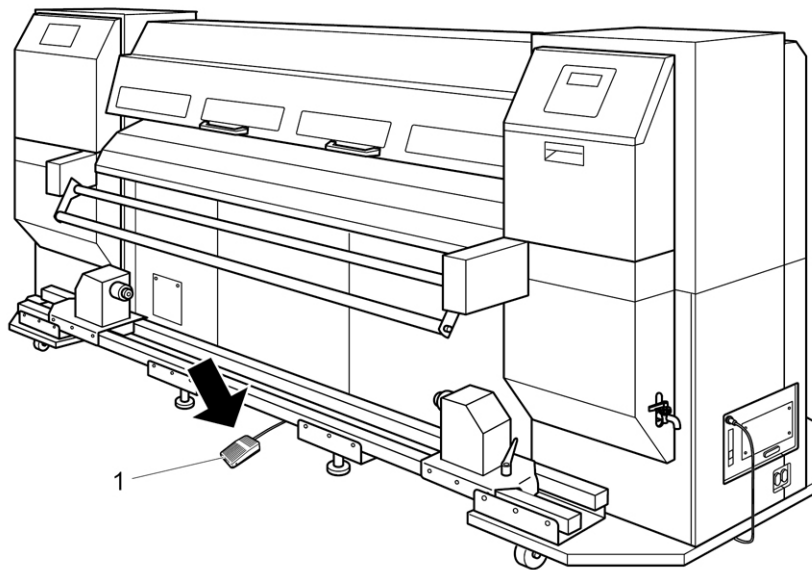
Step 2 Press the [F3] key in the media initial menu to raise the pressure roller.

- The MEDIA SET lamp lit (green).
- The following message is displayed on the operation panel.



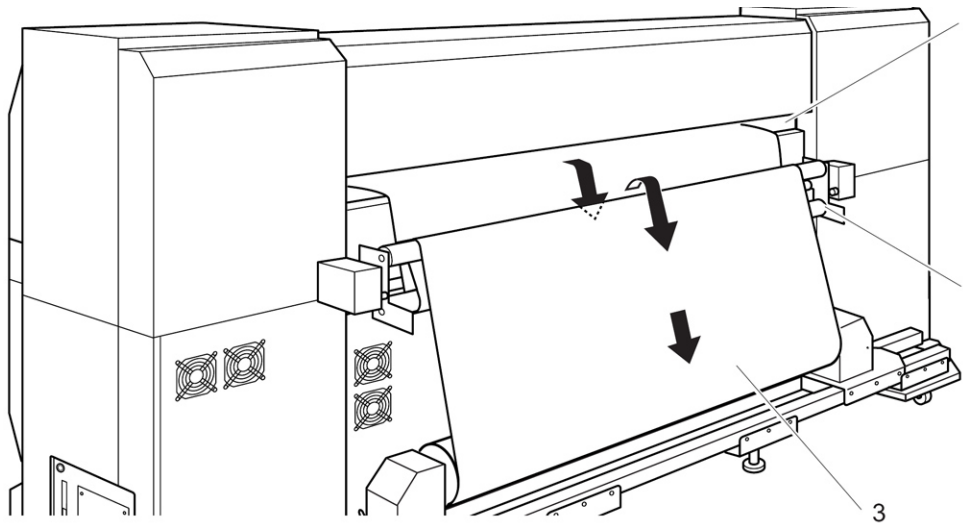
⚠ Notes ⚠

- When raising or lowering the pressure roller, you can use the foot switch instead of the control panel.



No.	Name
1	Foot switch

Step 3 Remove the roll media from the media feed slot and the tension roller.



No.	Name
1	Media feed slot
2	Tension roller
3	Roll media

Step 4 If a piece of media or media dust are in the printer, open the front cover and remove the media or media dust.

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